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ORIGINAL COMMUNICATIONS.

*Memoir on some Peculiarities in the Anatomy and Physiology of the SHARK, particularly as respects the Production of its Young. By Dr. S. L. MITCHILL.*

ALTHOUGH the generation and multiplication of animals have so long exercised the attention of philosophers, the whole subject still remains involved in intricacy and indistinctness. The maxim laid down by Harvey, and adopted by Linnæus, of *omne animal ex ovo*, that every animal proceeds from an egg, has, perhaps, been too generally received, since numerous facts, related by Mr. Bonnet, in his work, entitled, *Considerations sur les Corps Organisés*, evince the propagation of animals, in a great variety of cases, from GERMS. Notwithstanding the multiplicative powers of animals have been thus traced to eggs and germs, yet a popular distinction still prevails to a considerable extent, of classing animals that propagate their species by means of genital organs, into oviparous and viviparous.

The great discovery of Haller, that the membrane covering the yolk of an egg was really a conti-

nuation of the membrane covering the intestines of the chick, had not only given countenance to the idea of the pre-existence of the embryo, but has shown that animals, whether of the oviparous or viviparous kinds, really propagated their species in pretty much the same way.

Amidst the different modes in which the embryo and its membranes are organized in different animals, there seems to be one case which has not been hitherto described with the accuracy and minuteness which its singularity deserves: the genus of the *SQUALUS*, which includes all the animals of the shark tribe, has some peculiarities which make these animals approach both to the oviparous and viviparous classes, without, however, belonging strictly to either.

It had been known a long time, that the young of the shark had something in their structure considerably different from any other creatures, and figures of them have been given by Edwards, in his natural history, and probably copied from thence into the *Encyclopædia*; but there has been, as yet, no dissection of these animals in this period of their existence, nor any

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explanation of their physiology that I know of. It is the object of this short memoir to explain the structure and functions of the fœtus of a species of shark found frequently along the coast of New-York, in the waters of the Atlantic, during the summer months. About two years ago, as I was engaged in a fishing party in one of the bays on the south side of Long-Island, a shark, between four and five feet in length, was taken in the seine, and secured in our boat, without receiving any material injury. Upon examination, this animal was found to be a female, whose uterus contained eleven young ones, of the size and figure represented in the plate.

Besides these young ones that had advanced thus far in their growth, there were contained a large number of ova within the body of this fish, in different degrees of evolution and size, some of them resembling the full grown eggs of the tortoise, and others similar to the smaller rudiments of eggs found in the ovaria of laying-hens. On opening the uterus with a knife, the young fishes, as represented in the figure, were found each connected with an egg, dependent from that part of the belly which may be considered as the umbilicus, and appearing in the form of a very large hernia. This hernia, on examination, proved to be a true ovum, filled with yolky substance, evidently intended for its nourishment: and what was very remarkable, the young animal, though grown to a considerable size, and connected in this manner with its egg, had no connection whatever by means of an umbilical cord, a placenta, or by vessels of any kind, to the uterus of its dam; but it was so completely organized as to derive no sustenance to its body, nor to receive any renovation of its blood from its parent.

The membrane covering the egg contained most beautiful ramifications of blood-vessels. The arteries descending from the little fish could be seen sending off their branches over its whole exterior surface; and terminating in veins, to unite their trunks, and carry back their contents.

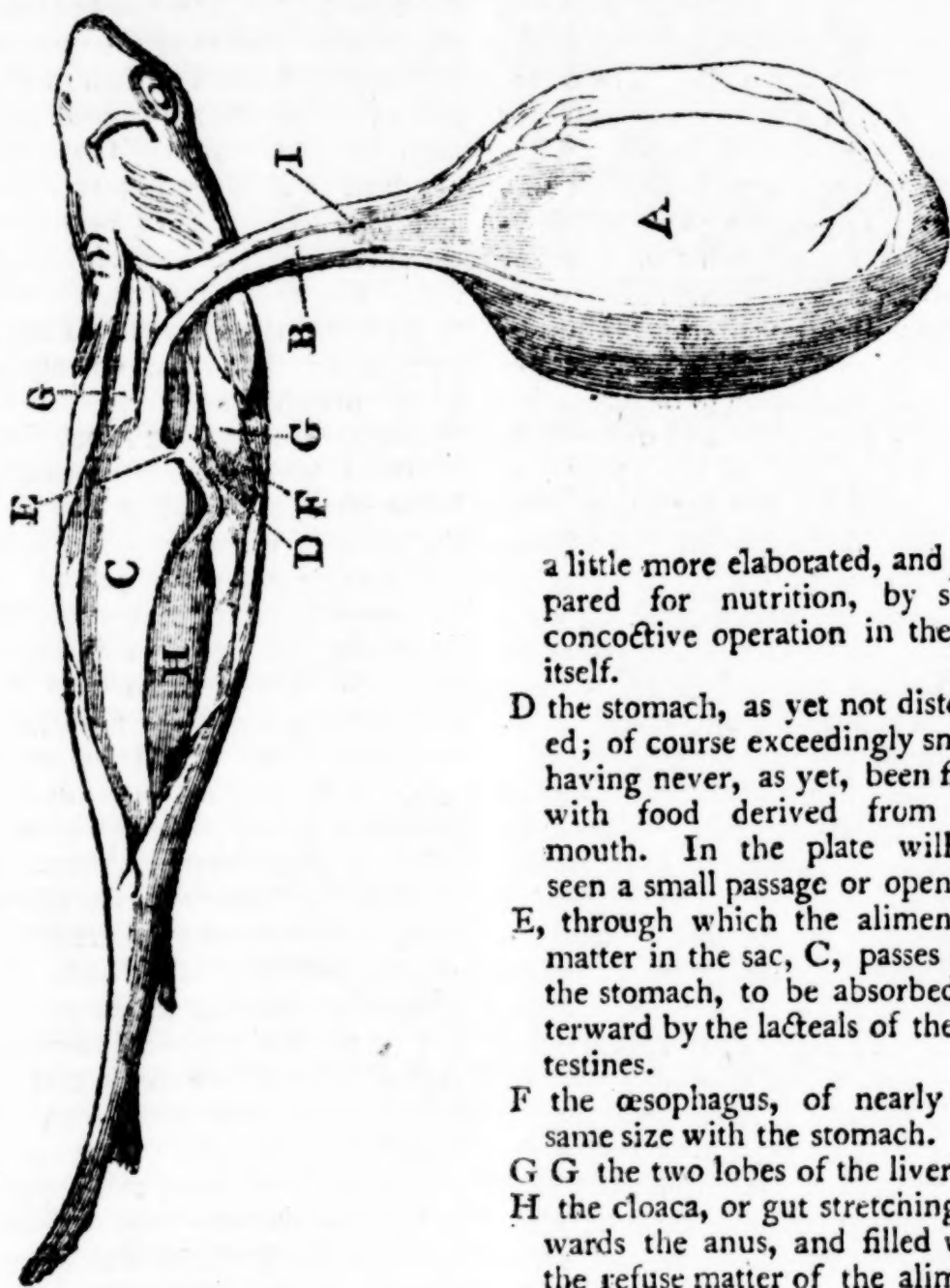
The singularity of all these appearances was considerably heightened by the capability of the little sharks, when cut out of the uterus, to live for a considerable time in the open air. The larger part of the brood had been left on the grass of the shore where the dam had been dissected; but the three which I reserved for examination lived, and exhibited, during the greater part of the time, brisk motion for almost two hours, although exposed to the temperature of a common atmosphere. During this time, while they lay before me on a plate, nothing of the kind appeared more beautiful or distinct than the branches of blood-vessels shooting through and running over the transparent membrane of the egg. The blood evidently appearing to acquire a brighter scarlet colour, whilst the fish was thus exposed to the air, than it had possessed during the immersion of the young animal in the fluid of the uterus. It seemed to have acquired more rapidly, and to a greater quantity than before exclusion from its maternal membrane, the oxygene of the air to which it was exposed; the union of which with the blood evidently brightened its colour, and imparted to it, at the same time, so much of a stimulant quality as to have shortened the duration of its life by excessive excitement.

The internal structure of the fœtus of this shark may be seen in the plate. The dissection was made by my colleague Mr. Post, Professor of anatomy in Columbia Col-



lege; and the drawing was executed, immediately after, by Dr. Alexander Anderson, of New-York, in

the presence of the late Dr. Elihu H. Smith, Mr. William Dunlap, and Mr. Thorne.



In this drawing,  
 A represents the ovum, with its exterior membrane dissected off.  
 B the internal tube or duct extending from the egg to a sac, or reservoir of nutriment, within the body of the fish.  
 C the sac alluded to in B, of considerable size, and occupying a good deal of room in the abdomen: it was filled with a pulpy or soft matter, evidently derived from the ovum, and apparently

a little more elaborated, and prepared for nutrition, by some concoctive operation in the sac itself.

D the stomach, as yet not distended; of course exceedingly small; having never, as yet, been filled with food derived from the mouth. In the plate will be seen a small passage or opening, E, through which the alimentary matter in the sac, C, passes into the stomach, to be absorbed afterward by the lacteals of the intestines.

F the oesophagus, of nearly the same size with the stomach.

G G the two lobes of the liver.

H the cloaca, or gut stretching towards the anus, and filled with the refuse matter of the alimentary mass.

I the external membrane connecting the egg with the fish, cut through and turned back.

A species of shark, called *catulus major vulgaris*, is delineated by Edwards, but appears to be different from this. He has taken two views of the parent animal, and two more of the young. From the figures there given, it would seem that the same law of generation obtained as in this species. All the species probably breed in the same way.

There is a great variety in the multiplicative process of living beings. The female *RANA PIPA*, or *Surinam frog*, nourishes its young in certain cells or cavities in her back, and not in the womb. The *OPOSUM* of this country supports her young appendant to the teats, within the paunch or sack, called a false belly. The *KANGAROO* of New-Holland has somewhat of a similar structure and economy. More extensive and penetrating inquiries show the exceptions to the common mode of generation to be almost indescribably curious and diversified. We see no end to the variety of ways in which the perpetuation of the species is carried on. Even Spallanzani (5 *Viaggi alle due Sicilie*, &c. p. 46), though he went to the Lake of Orbitello on purpose to examine the anatomy of the large eels which live there, could discover in them no appearance of sex.

When I published my Inaugural Dissertation, in 1786, "*Circa novi Genituram Animalis*," I was decidedly in favour of the hypothesis of *pre-existent germs*, and of the production of animals by their gradual *evolution*. All my numerous experiments on generation appeared, at that time, to lead to such a conclusion, though I have since had a good deal of reason to doubt the soundness of the inference: and the experiment now to be related, though it throws light on some part of the process, leaves the main question almost as unsettled as ever. In 1789 I ordered a large sow to be killed, immediately after having had intercourse with a male. On examining the genital organs, the blood-vessels of the vagina uterus, fallopian tubes, and fimbriæ, were more than usually distended, and the fimbriæ in particular were in a condition of high redness and inflammation. Their fibres were lengthened, and reached so far as, on one side, to embrace the whole

ovarium, and contain it within their enclosure. But the most remarkable appearances were in the ovarium itself. The sow had borne pigs before. Some of the ova were of course exhausted of their powers, and exhibited the appearance common in such cases. The whole ovarium was tinged with blood, and appeared to have been under the operation of a powerful stimulus. The entire substance seemed to have been enlarged. The ova partook of this enlargement, and all of them had evidently shared in the excitement and suffusion. Some of them were but little swelled. Some were so tumid as to be on the point of bursting. The membrane of others was ruptured, and the contents partly protruded; and, in several, the substance discharged from the broken ovum was fairly within the grasp of the fimbriæ. I imagined now I had before me proof sufficient to determine the *derivation of the fœtus from the mother*. I accordingly examined the portions of substance discharged from one ova, and extracted from others, with all possible care. But, instead of finding an embryo, or any thing like the rudiment of a young animal, the little masses I had obtained resembled coagulated blood more than any thing to which I can compare them, and appeared to have no more of organization or figure than is frequently seen in grumes or clots of that fluid.

New-York, June 6, 1798.

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*Extract of a Letter from a Gentleman in Philadelphia to his Friend in England, dated July 7, 1799.*

THIS city is again afflicted with what we improperly term Yellow Fever. It discovered itself about 17 days ago, beginning at the spot where it originated in each of



the two preceding years. Fortunately, a present dryness in the atmosphere has, as yet, kept it in check. A few cases only have occurred, and, consequently, but few deaths. But should a humid atmosphere succeed, the contagion may be expected to spread, and death again rear his hideous form, to stalk through the affrighted streets. I have said this malady is improperly termed; and why? Because, though its general features are those of the yellow fever, yet are there others that do not pertain to it: and, besides, the yellow fever of the West-Indies, whence ours is pretended to be imported, is not held to be contagious; the presumption therefore is, that it cannot be imported. It is, however, possible, that a fever of that kind may, by coming into contact with the stagnant and impure air of a ship's hold, (rendered still more impure by the contaminating effluvia arising from the bodies of seamen crowded together, and the nature of a perishable cargo) it is possible, I say, that contagion may, under such circumstances, be excited, and spread a pestilence in a distant country, where the atmosphere may happen to be in a state fit for the reception and conducting of contagion. But if ours be that acute, putrid, and pestilential disease, commonly called the plague, (and its symptoms and operation do not permit me to doubt it) we are not to search for it in a foreign origin. Numerous and stubborn facts, drawn from various parts of the United States, concur to forbid us. In Philadelphia the malady was plainly traced to its source in 1793. At Harrisburgh, a town on the Susquehanna, and far from any seaport, the same disease was generated at the same time, and proved uncommonly mortal. I can speak to this fact with precision, as I was then on the spot. There could be no importation in this case. In

1794, 1795, and 1796, the plague again broke out in Philadelphia, but soon disappeared, owing to the dryness of the atmosphere in each season. It appeared at New-Orleans too in 1794, sweeping away great numbers of the inhabitants. In 1797 Philadelphia was again visited by the pestilence, and lost about 1500 of her citizens, although not the fifth part of the population remained in town. In 1798 the same consuming pestilence returned among us, beginning at the same point where that of the preceding year began. Its appearance this year was uncommonly early. It was first observed in May: the cases were very few. In June it spread a little; in July it became more visible, for numbers died. It was not, however, till about the close of July, or beginning of August, that the faculty (a very few of them excepted) would acknowledge its presence; and then, forsooth, recourse must be had to the *Deborah*, a ship that arrived in port many weeks after the malady appeared that season. Her they dubbed the importing source of the contagion! The removal of this ship from a wharf where she had lain, on the south side of the city, to Kensington, a suburb on the northern side, and till then uninfected, was a circumstance which the advocates for foreign origin eagerly laid hold of; and they placed on it the greatest stress. But what did the fact go to prove? It proved nothing to their purpose. It proved, indeed, that the air in the ship's hold was a fit medium for receiving and conducting the contagion from one wharf to another, and nothing more! Yet, so blinded by prejudice or interest are some minds, that having once shut their eyes, they obstinately determine not to re-admit the light, lest their fortunes might suffer, or the reputation of a favourite city be impaired. Tales, most absurd, were

invented; first, to decry the existence of the malady; and, second, (when it could no longer be concealed) to find arguments against the non-importation of it. Nay, many went so far as to deny its contagious quality. By these false impressions, the few remaining citizens, thrown thus off their guard, and neglecting those cautionary means which prudence required, were daily hurried, in numbers, to their grave. How can those to whose peculiar charge the health of their fellow citizens is confided, answer for such mistaken conduct to their consciences; their country?

The plague this year (1798) raged with redoubled virulence, and for a length of time unknown here before. About 4500 persons became its victims.\* It left us only with the year, notwithstanding some severe frosts and snow in November and December. The sea-ports were now more generally infected with it, than in either of the former years of 1793, and 1797. It even appeared on the borders of Lake Champlain, where it proved highly mortal to the settlers. This is an important fact, in addition to that of Harrisburgh. How came the plague upon Lake Champlain? To evade this question, the friends to foreign origin deny that it was the same disease as ours, and to give greater plausibility to the assertion, they fabricated a new appellation, namely, the Lake Fever. But if my information may be depended upon, (and I believe it may) the disease, both there and here, was one and the same in its symptoms, its progress and effects. After having said so much on the subject of clashing opinions, it is now an act of justice

to observe, that, contrary to the doctrine promulged and maintained last year, by the Philadelphia College of Physicians, the Academy of Medicine of this city have announced their unequivocal belief in the local origin of this scourge of the American metropolis; the scourge, too, of many of her sister cities.

During last summer, and part of the winter, Philadelphia presented to the contemplative mind a solemn, a melancholy scene. Imagine to yourself a flourishing city, whose buildings extend a league in length, and nearly a mile in breadth, a proud port, whose capacious harbour, once bearing on its bosom a forest of masts, now a wasteful expanse! A population of 70,000 souls, suddenly reduced, by flight and pestilence, to less than 6000! Imagine this miserable remnant shut up from the eye, and nothing to be seen but carriages bearing the infected to the hospital, or hearses carrying the dead to the grave, and each, too, deserted by every relative and friend! Such was the awful, the impressive picture of Philadelphia in 1798.

Since I have dwelt so long upon this subject, in sketching out merely a few outlines, I cannot willingly quit it without saying something on the cause and means of preventing the return of the pestilence. I am well aware, however, that while the corporation of Philadelphia shall continue to be infatuated with the belief of imported contagion, so long will the true means of prevention be neglected or overlooked, and the city be subject to frequent returns of the malady. A belief more dangerous to the prosperity of the city, and the lives and happi-

\* Our published accounts of the deaths this season fall a few hundred short of four thousand! But it must be remembered, that it was not till early in August that any account of the mortality began to be taken. My computation, therefore, will appear to be moderate. Most of August, and all September and October, proved extremely mortal, from eighty to upwards of one hundred dying in a day.



ness of its citizens, could not have been cherished. We rely upon the rigorous execution of a quarantine law for the security of the place. This can only be compared to attempting a defence by the out-works, while the enemy is already in possession of the citadel.

It will be proper to premise here, that the greatest length of Philadelphia lies upon the Delaware.—This front, in its whole extent, is formed principally of a narrow filthy street, crowded with lofty dwelling-houses, pent up together, and deprived of the wholesome convenience of yards—I mean as to one entire side of the street. The margin of the river is lined with docks and wharves, from one end of the city to the other. At low-water the docks are left either partly or wholly dry, with their beds exposed, at intervals, during the day, to the powerful rays of an American sun. These beds are composed of a slimy ooze, mixed with putrescent and putrid matter, both animal and vegetable, collected from the city, the shipping, and the stream. I say the *stream*, because many noxious materials, borne forward with the tides, escape into the docks, where, meeting with eddy water, they remain to be deposited at low ebb. Thus there is a perpetual accumulation of matter, whose poisonous exhalations have, for several summers past, contaminated the atmosphere, and been, in my opinion, the leading cause of our pestilence. The same observations will apply to other sea-ports within the United States, wherever the malady has raged. In Philadelphia there is also a great common sewer, which, passing through the city, discharges its contents into the river, near to where the plague began in this and the two preceding years. Contrary to what ought to have been the construction of this conduit, the

tunnel lies considerably higher than low-water-mark; and the mouth, or outlet of it, whose arch should have extended below that mark, falls far short of it. Hence a bank of very offensive matter has accumulated here, and which, exposed, as it daily is, to the full action of the sun's rays, must steam with noxious vapours. An auxiliary agent of our contagion arises, possibly, from the numerous city privies, many of which are a century old. These, again, being unattended to, and communicating, more or less, with the wells every where dispersed, (and which alone furnish all the water used by the Philadelphians) must have a powerful tendency to render the latter unwholesome, and may not a little contribute to predispose the human system to disease under a contaminated atmosphere. I am happy to have it in my power to observe, in this place, that measures are now in a train of vigorous prosecution, for supplying this city with the pure water of the Schuylkill. This salutary plan will supersede the necessity of using pump-water. It will furnish additional security against fire; contribute to the cooling, the cleansing, and ornamenting the city; and, above all, to the common stock of health, whether the water be used in the parlour, the kitchen, or the bath.

Here, my dear Sir, I must abruptly leave you. My letters are this moment summoned to go on board. The vessel will instantly depart. It is now the 20th of July, and I can inform you, with pleasure, that the malady has, to all appearance, subsided. Thanks to the state of our atmosphere which would not suffer it to spread. My next shall contain a continuation of the subject, which I am not permitted to finish in this, and particularly the promised *means of prevention*.

*Extract of another Letter, dated  
July 26, 1799.*

**I**N my letter, dated the 7th inst. but which was not closed till the 20th, I promised to resume, in a future epistle, the subject of pestilence, which has so frequently, of late, attacked this and other cities within the United States. I have gone through the causes whence, in my opinion, the malady derived its source; and have, so far, attempted to prove its domestic origin. It now remains to touch on the *means of prevention*. But, first, let me premise, that in aught I have said, it is not to be inferred, that the plague cannot be transported from the old world into the new—it certainly may. Yet, in none of our periods of pestilence, (I date from 1793) can we derive it from a foreign cause; since it is well known that, during such periods, no vessels entered our ports from places infected with that disease.

To prevent, now, returning pestilence, I would class the means under the following nine heads:

1. Convert every dock into a *permanently wet or dry dock*.

2. Extend the arch which covers the mouth of the common sewer into the river, below low-water-mark, so as effectually to exclude the sun's rays; or, what is more advisable, let a necessary portion of this end of the tunnel assume a progressive descent towards and into the river; so as to keep its bottom constantly covered with water.

3. Fill up all the ancient noisome privies, and form new ones; or, where this cannot conveniently be done, throw into them a sufficient quantity of quick-lime. This should be done to privies of every description, and be repeated annually; first, on the setting in of the warm weather, and once a month, at least, during its continuance. This ne-

cessary regulation ought not to be left to the discretion of the inhabitants. It should be enforced by a city ordinance of the corporation, who ought to appoint proper officers to carry it into strict execution. Neglect of the officers to meet with certain and adequate punishment.

4. Introduce into the city wholesome water, for culinary and other purposes; establish public fountains and baths; and fill up all the public wells. The latter, if left open, (disused as they would now be) could answer no other purpose than to generate bad air.

5. Let a requisite number of fish-markets be erected, on piles driven into the ground, below low-water-mark. Make one or more trap-doors to each, through which the washings of the floor should pass off when the market is over; and prohibit the sale of fish at any other stand. This, too, should be regulated and enforced by a city ordinance.

6. In addition to the daily sweeping and cleansing of the streets by public scavengers, (and which ought to be performed every morning before the shops, stores, and warehouses are opened) the corporation should cause to be provided a number of water-carts, sufficient for watering, in hot and dry weather, every street in the city, at least once a day.

But, it is of little service if A take precautions for the preservation of his house, while B, his next neighbour, takes none, and, by his neglect, subjects the life and property of A to destruction. So it is with respect to cities surrounded by suburbs, over which the former have no controul. What avail the exertions of the city, if the suburb, by its criminal omissions, render them all abortive! This *imperium in imperio* is, in itself, a pest. The city jurisdiction of Philadelphia



should either be extended, by the abolition of the northern or southern liberties: or, should narrow prejudices counteract this salutary measure, the three authorities ought to co-operate in the due execution of a uniform plan, which has for its object the preservation of the citizens, and the prosperity of the city.

8. Drain off all stagnant waters in the vicinity—and,

9. It is *important* to make a change in the pavements of the footways, and, instead of bricks, to substitute stone flags. A heated atmosphere, plentifully charged with humidity, becomes the active conductor of contagion. Hence, the necessity of means to obviate this fatal property of the air. Now, it is well known that heated bricks absorb a considerable portion of every rain that falls on them; that the water so absorbed, is returned to the atmosphere by evaporation; that, in consequence, the air is again charged with a portion of that humidity of which it had just before been deprived; and thus another medium is prepared to give fresh activity to any existing contagion. I exposed the upper surface of a brick for four hours to the sun, when the mercury in Fahrenheit's thermometer stood at  $86\frac{1}{2}$  in the shade, which is not an immoderate degree of summer's heat for this city. The heated surface of the brick being next immersed in two quarts of water, it actually absorbed, in ten minutes, a fourth part of the whole. If, now, an estimate could be formed of the many millions of bricks employed in the foot pavements of Philadelphia, and daily heated by the sun, the quantity of water absorbed during a rain, and given back again to the atmosphere, in vapour, would appear to be incredible!

I will add, in this place, a few observations on some of the fore-

going heads, the better to elucidate my meaning and reasons.

In regard to the first head, the *wet dock* is to be preferred, being the healthiest and most convenient of the two. The water should be changed at every flood tide, till the proposed alteration in the docks shall take place: it will be proper, at low-water, during the summer, to spread over the beds of the docks a layer of quick-lime, to be repeated occasionally. It is to be regretted, that the local situation of Philadelphia precludes the idea of that superior and ornamental improvement, a quay. The great bodies of ice which, in winter, move up and down the Delaware, render the use of docks indispensable for the security of the shipping. But, seated as New-York is, upon the East-river, which is not, I believe, subject to that inconvenience, a quay might, with propriety, be extended along the whole length of that front. The like improvement would be peculiarly suitable to Charleston, (S. C.) and some other ports on the Atlantic coast.

As to the 4th head; the beauty and utility of public fountains are too obvious to require another word. But, on the subject of public baths, there is room to enlarge a little. Every reflecting mind, acquainted with the oppressive summer heats of America, must feel both surprize and regret at the total want of baths throughout the United States.—Health and long life, comfort and cleanliness, tranquillity and vigour, both of body and mind, with a long train of other blessings, are all intimately connected, in climates like ours, with the frequent use of the bath.

Q. If the hot-bath will not be discovered to be the best general remedy against pestilence?

Concerning the 6th head, as it respects watering the streets, it would not be advisable to continue

the practice during existing contagion; because of the humidity it would impart to the atmosphere.

There are two other things which, though of considerable importance to the health, comfort, and ornament of cities, I have neglected to notice under the foregoing heads: 1st. Trees before the houses; and, 2d. Firm, compact gravel carriage ways, instead of the stone pavements used in the middle of our streets. The foliage of the former would, in a great measure, defend both houses and side-pavements from the sun, and would add to the purity as well as coolness of the air. By the latter, we should gain two advantages—less heat still, and less noise. I can remark here, with great pleasure, that a spirit for planting of trees in their cities, has, of late years, become prevalent throughout the United States.

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*Reflections on the Character of MARY WOLLSTONECRAFT GODWIN.*

WHEN a great character appears in the world, every one is busied in contemplating and scrutinizing it, and various are the censures and plaudits which are given. Benevolent minds are most deeply interested in its investigation, from a conviction that its influence on society is of signal importance. One of these characters has lately appeared in the person of Mary Wollstonecraft Godwin; and, like a dazzling meteor, while yet we gazed, has vanished forever from our view. Her actions and writings have composed a theme that has long dwelt on my tongue, and employed my thoughts. They are, indeed, of no common kind; nor is it proper that they should pass unnoticed, since their direct tendency is to produce a revolution in principles and manners, the effects of which are

of infinite consequence. She discovered all the force of original genius, not only in detecting the errors of all former plans of instruction, but by devising new principles of education, sufficient to rescue the minds of females from the lethargy that has so long oppressed them. Hence I respected her, even to veneration. She appeared to me like one whom religion and philosophy had raised above the common elements of life, and rendered invulnerable to those darts of anguish, which a sensibility, fostered at the expense of reason and discretion, can sharpen to agony. Her views seemed not to be bounded by this world. The passions which animated her seemed all exalted into a pure ethereal fire, whose whole energy was directed to the completion of a grand scheme, in which self was absorbed and individuality lost. That she was alive to all the sympathies of nature—that her heart glowed with the most affectionate warmth, and was formed for the most ardent attachments, appeared indubitable; but that she should yield to their impulses when unsanctioned by wisdom, when the cost of self-denial was a mere sensual privation—that she should oppose her abstract opinions of rectitude to the general suffrages of mankind—that she should rashly set her face against the world, at the expense of her dearest interests, and thus render more doubtful even the duration of those darling schemes of domestic happiness of which her soul was so enamoured, seemed impossible.

In her *travels* I behold her in a new light. I saw her there the child of nature and the sport of feeling: yet, like a lovely infant smiling through its tears, changing alternately from anguish to delight; for in the midst of gloom her exquisite genius darted ever and anew, like sunshine on her mind, through



the crevices of the clouds which hung upon it. I saw her there reasoning and philosophizing with all the powers and the skill of a rational being, yet secretly preyed upon by circumstances which her reflections on the vicissitudes of life might have taught her to expect, and her firmness of mind should have prepared her to encounter. In this she but resembled the rest of her cotemporaries. Encounter them she did; but she wanted that support which a calm resignation would have given, could she have bowed beneath the chastening hand of affliction, as to a refining power, and exclaimed with the true christian, in sincerity of soul, "thy rod and thy staff, oh God! alike do comfort me:" but she had, by this time, discarded all faith in christianity, and belief in the immediate superintendence of providence: and it is, perhaps, from the period when she ceased to consider the sublime author of nature as the supreme governor and disposer of human events, that we may date her lapse from that dignity of character which before distinguished her. From this period she adored him, not as one ordering the occurrences of life with inscrutable but unerring wisdom, and directing the course of things to the ultimate promotion of good—not as one whose interposing power is ever silently at work on the grand theatre of human affairs, causing eventual good to spring from present evil, and permitting nothing but for wise and benevolent purposes; but merely as the great first cause and vital spring of existence. Hence she was excluded from the benefits of that faith which gives to heroic christians the stability of unshaken confidence. From this period she deified reason, and denied revelation: she ceased to regard herself as an accountable being: she assumed the provinces of judge and law-giver to herself; and, final-

ly, laboured to view all things as fabulous and visionary which are beyond the limits of human comprehension. Thus was she cut off from the chief advantage and solace of religion. What though she could not be conscious of any thing within herself, which, in her most solemn appeals to heaven, she could condemn as criminal or gross; still she suffered that mind to be occupied by private interests, and engrossed by an overweening solicitude about selfish enjoyments, which was wont to glow with ardent zeal for the advancement of general happiness, and lose its own cares in the desire of alleviating the miseries of others; while that love which she once declared could alone fill the soul, might have been almost totally excluded by the passion which absorbed her every feeling, and drank in her very vitals. To have fancied, then, that one of those invisible spirits which are said to hover round us, was placed over her as the guardian angel of her purity, and commissioned to inflict this disappointment to recall her to her first love, which includes the love and promotion of all that is good—to awaken her from her dream of confidence in one so inferior—and rouse her from that inactivity and uselessness into which she otherwise might sink—would have been a sweet consolation. In the passage above alluded to, she has acknowledged, that he who formed the heart can only fill it, and that love to man does but lend pinions to the soul, to waft it through devotion to his throne.

In the memoirs of her life, and her *Wrongs of Woman*, I felt shocked, and even disgusted, at the licence she seems to allow to the unrestrained indulgence of the feelings, in open contradiction to the virtue of self-denial, though in two instances—to avoid every vulgar surmise and indecent animadver-

sion, it needed but to be practised for a season. Justice, however, must allow, that in this, except indirectly by her own example, she injured no being in existence but herself—as much cannot be said for posterity. In one place she seems to prefer the risque of confidence to the safety of distrust; yet could she not have sufficient reliance on the object of her choice, at once to give up her independence, and tie herself to him by indissoluble bonds? Why then would she form a connection of such a nature without that firm reliance which would dissipate all doubt, and render trials needless? This appears to me a palpable inconsistency.

At one period of her life she seems to have given the wing to her imagination, indulged in all the enthusiastic reveries of a luxuriant fancy, and suffered life to evaporate in a rhapsody of sentiment. But there were moments, even during this empire of sensibility, when she was recalled to her former self—moments when the phantoms which deluded her distempered mind were disrobed of their enchantment—when the fleeting pleasures of time, which still eluded her pursuit, were estimated at their true value, and her soul sickened at the emptiness of those joys which, when seemingly most near, perpetually mocked her grasp: yet still she again relapsed into the error of eagerly hastening forward to the untimely practice of an abstract speculative theory of morals, incompatible with her own, and the general interests of society. Her's was the wild and visionary scheme of uniting, in her own experience, the blissful confidence, and tranquil joys of connubial life, with those inestimable privileges, and that perfect independence alone compatible with nothing but a single state. This it was that became the source of all her misfortunes; and this it was that

precipitated her to the brink of destruction.

I see her next, after a season of torturing conflict, the self-devoted victim of ungovernable sensibility—no longer able to endure the torment of her soul, or breast the overwhelming torrent of misfortune. I see her plunging headlong into the gulph of despair, and, with a deliberate firmness, worthy of a better purpose, resolving to snap the thread of her existence. I stand aghast at the dismal spectacle!—my soul shudders at the terrific ruin!—a creature so noble!—a genius so towering!—And can it be that thou hadst come to this? Can it be that thou couldst so balk the promise of thy better days, and contemplate this as the period of thy career—the end of all thy usefulness! Oh! Mary, thou who couldst speak with such sublime emotion of the God who formed thee, couldst thou think thou hadst a right to destroy his workmanship? He gave thee power over thy life it is true, but he also gave thee faculties to discern, that thou oughtest to preserve it. Conscious as thou wast of thy superior powers, and eminently distinguished with talents to nurture and promote every excellence that could bless and ennoble his creatures, couldst thou imagine thou hadst a right to thwart his purposes—to cut asunder the ties which bound thee to mankind—to sever thyself from them in the meridian of thy strength, thy sands scarce half run, and thy tasks unfinished? Well mightest thou afterwards confess, as thou didst through the voice of thy spirit in the cave of Fancy, that during the season of thy idolatry to the affections of thy nature, thou hadst “seen through a false medium,” and “neglected many opportunities of being useful, whilst thou fosteredst a devouring flame.”

From this view of her actions and character, what strange incon-



sistences appear! She wanted not magnanimity—she wanted not fortitude—the ills of life in their common shapes could not affect her—to shake her firmness, they must assume a peculiar form; yet, unaccustomed from self-confidence to believe it possible she could be foiled in her projects; unaccustomed to think that success would not crown all her undertakings, and ensure the attainment of every object of her wishes, when she felt herself reduced to the humbled situation of common mortals, conviction came upon her like a flood, and she wanted patience to endure it. Her lofty soul disdained submission to this pale faced virtue. Her sober lineaments and dead complexion suited not the temper of her feelings, and she abhorred life linked with so lame a companion. Oh! what an assemblage of contradiction does her character display!—What a striking instance of the frailty of human perfection does she exhibit to the world!—What mist obscured thy judgment?—What demon chained thy prudence, and palsied thy activity?—Where slept thy reason, whither wandered thy philosophy at this momentous crisis?—Could nought awaken these dormant powers, and bring them into action at a time like this—when nature shrunk from the demands of duty, and life and fame were just tottering on the verge of annihilation?—False and treacherous friends!—ye cowardly deserters in the hour of danger!—may the sons and daughters of men no more confide in your sufficiency, but learn hence, that he who has granted to finite beings these auxiliary aids, is alone empowered to give them sovereign efficacy.

I have asserted that the purity of her heart appears to be incontestible, yet I do not defend her opinions; at least, however just they may be, abstractedly considered, I think

them far from expedient to be reduced to practice. I can feel no hesitation in concluding, that when she entered into covenants, she believed herself actuated by the most virtuous and disinterested intentions; she conceived herself pledged in the most solemn manner, before the all-seeing eye of heaven, to perform all the relative duties annexed to her station as a wife, and these duties she held sacred; but she would not reconcile it to her high idea of the nature of the matrimonial connection to suppose, that the seal of human contrivance, in any form of words, was necessary to cement and strengthen the contract, or that the sanction of men could confirm and knit closer those ties which can alone bind the union of hearts, without which marriage is but a mockery. Yet how sorely was she deceived by the fancy that she was treading upon sure ground, because she believed herself governed by solid principles. “*Truth must prevail,*” was a part of the Godwinian creed, which most probably inspired her sanguine expectations; and I can have no doubt of the sincerity of her belief, that in her conduct she strictly adhered to the simple rule of right, and dictates of truth, abstracted from what she called the false opinions which influence the world. She did not believe that a civil institution respecting marriage was unnecessary, for the sake of order, and the restraint of those who, through weakness or ignorance, are unable to govern themselves; but she was firmly fixed in the opinion, that the existing laws on this subject, as well as the prevailing notions of unnatural duties, and partial prescriptions of rules for action, are particularly to woman unjust, tyrannical, and oppressive. With the highest sense of her sex’s natural rights, as rational and free-born beings, it is not surprizing that her

whole soul should be filled with indignation against the abuses of power she perceived; and knowing their subjugation to laws which they had no part in framing—laws, passed without their consent, or even knowledge, and from which there is no appeal; that she should feel the utmost aversion to giving them her countenance, by submitting her neck to their unequal yoke? Can we not easily conceive, that the strongest feelings of her mind must have revolted from it?

This led her to disregard her present interest, and the opinion of the world, and overlook the effects of her example, on those who, not comprehending her motives, might catch at it as a covert, to shelter their licentious propensities, and justify their vicious habits.

Personal and mental independence was her darling object: she could not submit to have even her thoughts shackled by prejudices—they must be all original and true to nature; and from the complexion of her character we may conjecture, that she could never have endured, in the case of affection and esteem, subsiding after marriage, and decided dissonance of character upon more intimate acquaintance dissolving the chain of union, to practise that kind of hypocrisy, which decency is said to require, in keeping up the force of appearances in the presence of witnesses. And to live at open variance in such habits of intimacy would, to her feeling and sympathetic heart, have been equally impossible.

By her letters to the monster of insensibility, who deceived and abandoned her, the severity of my decisions were softened, and my aversion converted into sympathy. From these letters, the purity of her heart appears to be incontestible; yet the fallacy of her projects can be no where more forcibly exemplified, than from the practice

they delineate of her own painful experience. The knowledge of her excruciating sufferings may balance the dreaded effects of her baneful example, and proclaim a solemn warning to others, to beware of treading in her footsteps.

A reformation, in manners, in many respects, is truly to be desired, and the labours of individuals would produce a better effect on forwarding this reformation, than in breaking down the restraints of law. I cherish a hope, that the efforts which have been made, will not be lost, but that their influence may tend to equalize the condition and privileges of the sexes, without entrenching upon the necessary guard of civil institutions, or confounding their salutary regulations with the exercise of despotic tyranny. Let us pay no homage to empty names; let us render it only when it is due; nor, at the bidding of the world, reverence and obey the mandates of injustice—but let us not level ourselves with the wild animals of the forest, who range the deserts and the mountains free and unrestrained, unconscious of a tic, with no local attachment or home to resort to, but such as the impulse of the moment provides. Let us not, in flying from a servile submission to the decrees of power, return to a savage state of lawless liberty. The sense of rectitude in the breast of some, would be sufficient to preserve them in the path of duty, and deter them from infringing the order of society, without the interference of legislative authority; but it would not protect them from the deceptions, the outrages and oppression of others, who seeing their unguarded state, might mark them for their prey.

Schemes of independence have produced dangerous experiments, while, in fact, there is no such thing as perfect unequivocal independence in the world. There may be inde-



pendence of fortune, but not of mind, unless we shut out all that can solace life, and alleviate its sorrows. While we are subject to the infirmities of humanity, and even in our most happy state, we must be indebted to our fellow beings for all the pleasures, and even comforts of existence.

Turn but the tide of popular declamation against certain actions and practices which have long been tolerated, and imprint on them the lasting mark of infamy, and we shall soon see them banished from, at least, the higher and middle ranks of society; for I am convinced that things have been done, out of the then wantonness of power, merely because it was known they could be acted with impunity. How ready are the sparks of indignation to mount into a blaze at the infliction of a blow on one of the softer sex? How quickly does contempt descend on the perpetrator of the deed! dastardly and mean are the epithets which instantly brand him. Fix but the same indelible stamp upon every other injury they suffer, and all the aims of justice are accomplished.

For this let the clear stream of reason, and rapid torrents of eloquence, burst from their fountains, and shew us, that in the silent lapse of time they can even wear away stones—for this, let them gush with their most impetuous force upon the world, and bear down every thing before them, that the flinty rocks of opposition may no more erect their inflexible fronts on the side of cruelty and oppression, and shelter their enormities.

L. M.

*Walstein's School of History. From the German of Krants of Gotha.*

**W**ALSTEIN was professor of history at Jena, and, of course, had several pupils. Nine

of them were more assiduous in their attention to their tutor than the others. This circumstance came at length to be noticed by each other, as well as by Walstein, and naturally produced good-will and fellowship among them. They gradually separated themselves from the negligent and heedless crowd, cleaved to each other, and frequently met to exchange and compare ideas. Walstein was prepossessed in their favour by their studious habits, and their veneration for him. He frequently admitted them to exclusive interviews, and, laying aside his professional dignity, conversed with them on the footing of a friend and equal.

Walstein's two books were read by them with great attention. These were justly to be considered as exemplifications of his rules, as specimens of the manner in which history was to be studied and written.

No wonder that they found few defects in the model; that they gradually adopted the style and spirit of his composition, and, from admiring and contemplating, should, at length, aspire to imitate. It could not but happen, however, that the criterion of excellence would be somewhat modified in passing through the mind of each; that each should have his peculiar modes of writing and thinking.

All observers, indeed, are, at the first and transient view, more affected by resemblances than differences. The works of Walstein and his disciples were hastily ascribed to the same hand. The same minute explication of motives, the same indissoluble and well-woven tissue of causes and effects, the same unity and coherence of design, the same power of engrossing the attention, and the same felicity, purity, and compactness of style, are conspicuous in all.

There is likewise evidence, that each had embraced the same scheme

of accounting for events, and the same notions of moral and political duty. Still, however, there were marks of difference in the different nature of the themes that were adopted, and of the purpose which the productions of each writer seemed most directly to promote.

We may aim to exhibit the influence of some moral or physical cause, to enforce some useful maxim, or illustrate some momentous truth. This purpose may be more or less simple, capable of being diffused over the surface of an empire or a century, or of shrinking into the compass of a day, and the bounds of a single thought.

The elementary truths of morals and politics may merit the preference: our theory may adapt itself to, and derive confirmation from whatever is human. Newton and Xavier, Zengis and William Tell, may bear close and manifest relation to the system we adopt, and their fates be linked, indissolubly, in a common chain.

The physician may be attentive to the constitution and diseases of man in all ages and nations. Some opinions, on the influence of a certain diet, may make him eager to investigate the physical history of every human being. No fact, falling within his observation, is useless or anomalous. All sensibly contribute to the symmetry and firmness of some structure which he is anxious to erect. Distances of place and time, and diversities of moral conduct, may, by no means, obstruct their union into one homogeneous mass.

I am apt to think, that the moral reasoner may discover principles equally universal in their application, and giving birth to similar coincidence and harmony among characters and events. Has not this been effected by WALSTEIN?

Walstein composed two works. One exhibited, with great minute-

ness, the life of Cicero; the other, that of the Marquis of Pombal. What link did his reason discover, or his fancy create between times, places, situations, events, and characters so different? He reasoned thus:—

Human society is powerfully modified by individual members. The authority of individuals sometimes flows from physical incidents; birth, or marriage, for example. Sometimes it springs, independently of physical relation, and, in defiance of them, from intellectual vigour. The authority of kings and nobles exemplifies the first species of influence. Birth and marriage, physical, and not moral incidents, entitle them to rule.

The second kind of influence, that flowing from intellectual vigour, is remarkably exemplified in Cicero and Pombal. In this respect they are alike.

The mode in which they reached eminence, and in which they exercised power, was different, in consequence of different circumstances. One lived in a free, the other in a despotic state. One gained it from the prince, the other from the people. The end of both, for their degree of virtue was the same, was the general happiness. They promoted this end by the best means which human wisdom could suggest. One cherished, the other depressed the aristocracy. Both were right in their means as in their end; and each, had he exchanged conditions with the other, would have acted like that other.

Walstein was conscious of the uncertainty of history. Actions and motives cannot be truly described. We can only make approaches to the truth. The more attentively we observe mankind, and study ourselves, the greater will this uncertainty appear, and the farther shall we find ourselves from truth.

This uncertainty, however, has



some bounds. Some circumstances of events, and some events, are more capable of evidence than others. The same may be said of motives. Our guesses as to the motives of some actions are more probable than the guesses that relate to other actions. Though no one can state the motives from which any action has flowed, he may enumerate motives from which it is quite certain, that the action did *not* flow.

The lives of Cicero and Pombal are imperfectly related by historians. An impartial view of that which history has preserved makes the belief of their wisdom and virtue more probable than the contrary belief.

Walstein desired the happiness of mankind. He imagined that the exhibition of virtue and talents, forcing its way to sovereign power, and employing that power for the national good, was highly conducive to their happiness.

By exhibiting a virtuous being in opposite conditions, and pursuing his end by means suited to his own condition, he believes himself displaying a model of right conduct, and furnishing incitements to imitate that conduct, supplying men not only with knowledge of just ends and just means, but with the love and the zeal of virtue.

How men might best promote the happiness of mankind in given situations, was the problem that he desired to solve. The more portraits of human excellence he was able to exhibit the better; but his power in this respect was limited. The longer his life and his powers endured the more numerous would his portraits become. Futurity, however, was precarious, and, therefore, it behoved him to select, in the first place, the most useful theme.

His purpose was not to be accomplished by a brief or meagre story. To illuminate the understanding, to charm curiosity, and

sway the passions, required that events should be copiously displayed and artfully linked, that motives should be vividly depicted, and scenes made to pass before the eye. This has been performed. Cicero is made to compose the story of his political and private life from his early youth to his flight from Astura, at the coalition of Antony and Octavius. It is addressed to Atticus, and meant to be the attestor of his virtue, and his vindicator with posterity.

The style is energetic, and flows with that glowing impetuosity which was supposed to actuate the writer. Ardent passions, lofty indignation, sportive elegance, pathetic and beautiful simplicity, take their turns to controul his pen, according to the nature of the theme. New and striking portraits are introduced of the great actors on the stage. New lights are cast upon the principal occurrences. Every where are marks of profound learning, accurate judgment, and inexhaustible invention. Cicero here exhibits himself in all the forms of master, husband, father, friend, advocate, pro-consul, consul, and senator.

To assume the person of Cicero, as the narrator of his own transactions, was certainly an hazardous undertaking. Frequent errors and lapses, violations of probability, and incongruities in the style and conduct of this imaginary history with the genuine productions of Cicero, might be reasonably expected, but these are not found. The more conversant we are with the authentic monuments, the more is our admiration at the felicity of this imposture enhanced.

The conspiracy of Cataline is here related with abundance of circumstances not to be found in Sallust. The difference, however, is of that kind which result from a deeper insight into human nature, a more accurate acquaintance with

the facts, more correctness of arrangement, and a deeper concern in the progress and issue of the story. What is false, is so admirable in itself, so conformable to Roman modes and sentiments, so self-consistent, that one is almost prompted to accept it as the gift of inspiration.

The whole system of Roman domestic manners, of civil and military government, is contained in this work. The facts are either collected from the best antiquarians, or artfully deduced from what is known, or invented with a boldness more easy to admire than to imitate. Pure fiction is never employed but when truth was unattainable.

The end designed by Walstein, is no less happily accomplished in the second, than in the first performance. The style and spirit of the narrative is similar; the same skill in the exhibition of characters and deduction of events, is apparent; but events and characters are wholly new. Portugal, its timorous populace, its besotted monks, its jealous and effeminate nobles, and its cowardly prince, are vividly depicted. The narrator of this tale is, as in the former instance, the subject of it. After his retreat from court, Pombal consecrates his leisure to the composition of his own memoirs.

Among the most curious portions of this work, are those relating to the constitution of the inquisition, the expulsion of the Jesuits, the earthquake, and the conspiracy of Daveiro.

The Romish religion, and the feudal institutions, are the causes that chiefly influence the modern state of Europe. Each of its kingdoms and provinces exhibits the operations of these causes, accompanied and modified by circumstances peculiar to each. Their genuine influence is thwarted, in different degrees, by learning and commerce.

In Portugal, they have been suffered to produce the most extensive and unmingled mischiefs. Portugal, therefore, was properly selected as an example of moral and political degeneracy, and as a theatre in which virtue might be shewn with most advantage, contending with the evils of misgovernment and superstition.

In works of this kind, though the writer is actuated by a single purpose, many momentous and indirect inferences will flow from his story. Perhaps the highest and lowest degrees in the scale of political improvement have been respectively exemplified by the Romans and the Portuguese. The pictures that are here drawn, may be considered as portraits of the human species, in two of the most remarkable forms.

There are two ways in which genius and virtue may labour for the public good: first, by assailing popular errors and vices, argumentatively and through the medium of books; secondly, by employing legal or ministerial authority to this end.

The last was the province which Cicero and Pombal assumed. Their fate may evince the insufficiency of the instrument chosen by them, and teach us, that a change of national opinion is the necessary prerequisite of revolutions.

(To be continued.)

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#### ON AMERICAN LITERATURE.

SIR,

THERE is no department of your work which an ingenious reader will attend to with more curiosity, than that containing the review. Among the happinesses of existence, I do not remember to have seen the *bliss* of publication mentioned; but, surely, there is no felicity to be compared



with this. The reason, perhaps, is by no means discreditable to human nature. It is a branch of the love of existence, and of fame, and this passion carries with it higher, as well as purer gratification, than any other.

The love which a man manifests for his book, has been often compared to his attachment for his child. Books have frequently been termed the *offspring* of the brain; and our fondness for this offspring has been called *parental*. The comparison is just; and parental solitudes and biasses are, at least, as frequent and conspicuous, with regard to our typographical progeny, as to that which moves about on two legs. We are no less anxious that its garb should be ornamental and neat, that it should be introduced to an extensive circle of acquaintance, and that it should be admitted to the familiarity and confidence of those whose approbation is the test of merit.

We know that the success of any being depends, in an high degree, upon his *reputation*. Independently of our genuine merits, those whose conduct may influence our happiness, may be governed by the species of repute that happens to be connected with our names. We cannot display our wit, or exert our benevolence, unless admitted into intercourse and contact with those who have taste to admire, and sensibility to feel; but our introduction chiefly depends upon the character that we have previously established, and the rumours that are current in society respecting us.

Good report, therefore, is of great value; and as a man loves it for himself, he loves it for his child, and especially for his book. In truth, the parallel between children and books, though just in a loose and popular sense, will be found, on a closer view, to be defective. A book is the repository of our own language and ideas, and audience

and deference must therefore be as desirable to what our pen conveys as what our lips utter.

Reviewers are to be considered as auditors who comment on our discourse in our presence, and likewise as men who employ themselves in diffusing their opinions of our merits in as wide a circle as possible. They are not censurers or eulogists who pursue us to our closets, and admonish or applaud us in retirement, with none to witness the humiliations of our vanity or the elations of our pride. They call as loud, and gather round them as numerous an audience as they can, and trumpet forth our virtues or follies in the most sonorous key. No wonder, therefore, that we are anxious for the *good word* of reviewers, that we eagerly investigate their verdict, and are dissatisfied or pleased in proportion to the censures or praises conferred. Hence, your judgment of authors, will be more carefully attended to than your miscellaneous or narrative productions.

This curiosity, however, will, of course, be chiefly limited to authors, and to those who design to be such. The number of those who write books, especially in our native country, is, unluckily for you, extremely small. That set or class of men, denominated authors, and which is so numerous in the European world, is, on this side the ocean, so few as scarce to be discernable amidst the armies of merchants, artizans, physicians, advocates, and divines, scattered through the land. Indeed, if an author be defined to be a creature who devotes regular and daily portions of his time to writing that which shall some time be published, I question whether one such creature shall be found among us. This definition may be made still more rigorous, and those may be named authors, to whom the pen is not only the means of regular employment, but of subsist-

ence. In this sense, he that should set out in search of an author, would be engaged in a still more hopeless undertaking.

The number of those who repair to a desk, take pen in hand, and trace black or red lines upon paper, with the same regularity, and with the same views, as others wield the awl, the needle, and the adze, is by no means inconsiderable; but this class is busied the live-long day, either in placing figures beside and under each other, in making out catalogues of names, or in composing instruments affecting property, and whose usefulness is limited to one, two, or three persons. Their aim is not to transfer the sense of some book in a foreign language into our own tongue, nor to convey, through the medium of the press, their own ideas, or the ideas of other men, in their own words. In short, they are clerks or scriveners, writers of *deeds* and doers of *writings*, but not authors or translators.

I am desirous of knowing the cause of this want of authorship among us. Four millions of persons, generally taught to read, and not overpowered with the barbarism of Algonquin savages, or the indigence of Polish serfs, have taylor, carpenters, and even lawyers and physicians among them, but not one author can be found. Is this deficiency a proof of refinement or stupidity? Is it a topic of congratulation or condolence?

Though authors be wanting, books are plentifully furnished; but these, though sometimes printed, are seldom written among us. It flows not from dearth of curiosity, or sterility of meditation; not from the want of inclination to purchase, or leisure to read. These are possessed by us in as large portions as by any nation. It is true that the constant demand may be unequal to the subsistence of any one man,

and this insufficiency may flow from the smallness and dispersion of the whole number of inhabitants, from the cheaper workmanship of British artists, from the greater lucrative-ness of other methods of subsistence, from the easy accessibility of the pulpit, bar, and compting-house, to those who, if shut out from these, might strive to get their bread by authorship, and from other causes not reproachful to the curiosity, diligence, or genius of our countrymen. These causes may account for the want of writers by *trade*: but, since men sometimes write and publish from other motives than the love of gain; since books are elsewhere produced by the thirst of reputation, by the impulse of genius, by the passion for invention, arrangement, and discovery; as well as by the appetite for gold, or the suggestions of want, one is tempted to inquire why this does not sometimes happen among us. In truth, when it is considered that the European market is open to our book, as well as to our picture-makers, the non-existence of authors by *trade*, who owe their being, if not their subsistence to America, may still excite our wonder; but, dropping the profession, let us ask why book-makers of a different kind are so rare?

Perhaps my readers may question the truth of the fact, and may remind me of the propriety of determining whether book-makers be rare or rarer in proportion to our numbers, than in other civilized nations. Perhaps I have pronounced too hastily on this point. It may be needful to cast an eye over the departments of our literary world, and compute the kind and number of original performances that issue from our presses.

In making this review, I find an annual harvest of sermons, orations, inaugural treatises in medicine, and pamphlets that discuss the reigning



political topic. The hearers of a sermon or oration, delivered on the death of some eminent personage, or the anniversary of some national event, or some fast or festival, request a copy of the speech or exhortation. Some hundreds are printed, and an half score of them are handed by the author to his friends. When many of these are collected into one hand, they are bound into a volume, and placed upon a shelf, where their repose is unmolested, save by rats and white-washers. The remnant being still in sheets, supplies the printer with wrappers to his quills, quires, and ink-powder. Perhaps the United States produce two dozen sermons, and half the number of orations, in a year.

A medical thesis used to be composed of fifteen or twenty pages of barbarous Latin, in which the name and attributes of some disease, and the common modes of treatment, were delivered. These were preceded by three or four separate dedications, which some pedagogues was paid for cloathing with *inscriptive* formality and elegance. These theses are now written in English. These precious monuments of juvenile proficiency and literary gratitude, circulate, in like manner, among the tutors and fellow-students of the candidate. The surplus, of fifty or an hundred, is packed in a trunk, or scattered in a garret at the author's lodgings. Eight or ten of these may be the product of the American schools in a year.

Pamphlets, on some transitory topic of municipal or national government, the making of war, the displacing of public officers, the building of an aqueduct, or digging a dyke, or erecting a bank, are sometimes to be met with. These spring up and die with the occasion. They are seldom entitled, by their intrinsic merits, to republication, or even to be reposit

between two sheets of paste-board. The annual produce, in this kind, is unequal and hard to be computed, but he will not fall short of the truth, who limits them to eighteen or twenty.

Works that are swelled to the bulk of a volume, are till more rare. Science, history, and poetry, have received but few accessions from the citizens of the United States. There are, doubtless, men who diligently study what is written, and acquire what is known; but the sagacity which shall detect new existences, or trace new relations, has hitherto, for the most part, wrought in secret. Some indigenous plants have been discovered, and their healing efficacy been examined; some speculations upon Indian languages, some collections of public facts in the early period of our settlement, some plain details of recent events, some poems, epic, ludicrous, and descriptive, and some specimens of fiction, in prose, have been published. The value of these, considered in themselves, I shall not discuss; but, in relation to the mass of human knowledge, it may be safely pronounced to be extremely small. In systematic and encyclopedical arrangements, they may find a place. They add a loop or a nail to the wall, but the structure is carried forward and raised higher only by European hands.

The number of *volumes* in the various branches of art and science written in America, during the last sixteen years, the period in which we have been a nation, would not, perhaps, be found to exceed an hundred. No small portion of these have owed their existence to the depopulation of the country by epidemical diseases. The physicians have split into factions, by one of which, the origin of our calamities is traced to the West-Indies, and by the other, detected lurking in our privies and sewers. Which

of these is right, time must decide; but the materials of decision are extremely copious. No doubt, in the course of this controversy, facts and reasonings in the art of healing, and in that branch of political economy which respects the health of the people, have been added to the mass of human knowledge.

There is one kind of authorship to which Americans have shewn a stronger propensity than any other, and that is, the composition of political invectives for a newspaper. Those diurnal sheets are, perhaps, more widely diffused and read, than in any other part of the world. Their columns are generally supplied with notices of something to be bought or sold, and with transcripts from commercial letters, and from foreign gazettes. There is usually, however, a space some inches square, which the editor or his friends supply with sage remarks upon the latest intelligence from Europe; predictions of the consequences to ensue from the shock of certain armies which the last courier informed us were marching towards each other, or from the encounter of certain squadrons that were said to be at sea; narratives of some fire, or riot, or military shew, or anniversary feast; or, lastly, some obloquy upon the persons and motives of those whose political creed is adverse to that maintained by this gazette. The value of newspaper rhetoric and history, is more easily settled than the quantity per day or per year. The value, with some very few exceptions, is so small as not to amount to any critical denomination: and, with regard to the quantity, the proper subject of regret is, not that it is so small, but that it is so large.

Such appears to me to have hitherto been the literary harvest of America, and this is the harvest which critics must superintend. The tares and rubbish are abundant, and the

grain is neither vigorous nor plentiful. This, however, scarcely constitutes any objection to the utility of this office. The exact amount of our wealth seems equally desirable to be known, whether that amount be much or little; and it is not easy to overrate the dignity of that province which undertakes to give a monthly statement of the literary productions of any civilized country.

Give me leave to add that your review should comprehend every valuable American performance published since the revolution. The number is not large, and there are few of us acquainted with the achievements of our countrymen, in authorship, during the last sixteen years. Be they heroic or contemptable, they ought to be known. Perhaps a more accurate scrutiny may prove them more worthy of respect, than they have appeared to

Your well wisher,

CANDIDUS.

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*Some Account of SILIUS ITALICUS.*

*Mr. Editor,*

THE translations from SILIUS ITALICUS, which appeared in your last Magazine, have pleased me so much, that I cannot but wish that Mr. Alsop may find sufficient encouragement to favour the world with the publication of the entire work. So elegant and poetical a version would rescue the Latin poet from that obscurity and neglect to which he has been so long condemned. The most celebrated poets of Greece and Rome have already found able translators. Modern critics, in their enthusiastic admiration of Homer and Virgil, have overlooked or despised every other of inferior rank; and we find Silius Italicus rarely mentioned, or mentioned with indiffer-



ence or contempt. LUCAN long suffered under the unjust censures of the brutal *Scaliger*. In later times more justice has been done to his merit; and the translation of Mr. ROWE has increased the good opinion of those who are not enslaved by the prejudices of education, or the dogmas of literary censors. I do not intend now to enter into a discussion of the merits of SILIUS, or to attempt a *critique* on his poem. This would demand more attention than I have leisure to bestow; but, if executed with discernment and skill, would be an useful and instructive task. Mr. A. himself, or some of your classical correspondents, may feel disposed to exercise their critical sagacity and talents on the subject. Even an analysis of the Latin performance would gratify the liberal curiosity of some of your *unlearned* readers. To such, the following brief account of the life and character of SILIUS ITALICUS may prove acceptable.

The little knowledge we possess of this poet is derived from one of the letters of Pliny the younger, and the epigrams of Martial; both of whom were his friends and contemporaries. He was born during the reign of Tiberius, but the place of his birth is uncertain. Some have fixed it in Spain, others in Italy. The latter is the more probable. He came, early in life, to Rome, where he applied himself, with great diligence, to those studies which form the orator and advocate. He selected Cicero, whom he warmly admired, and successfully imitated, as the most finished and perfect model of eloquence. By his industry and genius he established his reputation as an accomplished advocate and distinguished orator. He was engaged in numerous and important causes, which he managed with equal success and applause. By some he has been

censured for voluntarily undertaking the office of an accuser, against those whom the infamous Nero had selected for destruction. His subsequent conduct, after the death of that tyrant, seems to have nearly effaced the stain which his reputation had received. He was three times consul, and exercised that office at the time of Nero's death. In the reign of Vespasian he was sent as pro-consul into Asia, from whence he returned with increased reputation. He soon after retired from the toils of office, and the management of public affairs, and lived, in literary ease, among the leaders of the State, without power and without reproach. He devoted himself to literature, but chiefly to poetry. His house was the resort of the most enlightened men of the time, by whom he was courted and admired; and, when disengaged from the employment of writing, he spent whole days in learned and polite conversation. On account of his advanced years, he retired, not long before his death, wholly from the city, and remained in Campania; and, according to Pliny, that he might not be forced to pay his court to the new emperor. Pliny praises Trajan because this freedom was permitted, and Silius, for daring to exercise the liberty.

SILIUS possessed many seats and villas, and was fond of changing the old for some new purchase. His most favourite places of residence were one of the villas of Cicero, and the farm of Virgil, of both of which he was the proprietor. As his love of eloquence had induced him to select the former for his imitation, so his passion for the muses led him to the choice of the latter, at whose tomb he indulged in all the luxury of the most enthusiastic admiration. An excessive lover of antiquities, of rare and beautiful objects, he had collected, in many places, a great

number of books, statues, and pictures, which he kept not merely for ostentation, but to gratify his great veneration for the authors. The principal object of his veneration was Virgil, whose birth-day he annually celebrated at *Neapolis*, with more religious observance than his own, and would often visit the tomb of his favourite poet as the temple of a divinity.

In this tranquil retirement, in the pursuits of philosophy and poetry, he passed his 75th year, when, having been long troubled with an incurable ulcer, though possessed of a delicate rather than infirm constitution, he became weary of his malady, and sought death, with invincible constancy, by a total abstinence from food. To his last days, says Pliny, he was fortunate and happy, unless his felicity was impaired by the loss of the youngest of his two sons; but he left the eldest in the flower of his age, possessed of wealth, and honoured with the office of consul.

He was endowed with an ardent and comprehensive mind, which fitted him to shine in any department of literature or science. His poetry exhibits more of art than genius—*Scribebat carmina majore curâ quam ingenio*, says Pliny. This opinion we shall be more inclined to think just, when we consider that he did not begin to write until he was far advanced in years, when the vigour of his imagination must have been impaired, and the fire of his genius abated. His friend MARTIAL has bestowed on him higher praise; but something must be allowed to the partiality of friendship and the fancy of the poet.

Silius hæc magni celebrat monumenta  
Maronis,  
Jugera facundi qui Ciceronis habet.

\* CHRISTOPHERO LANDINO, in a Latin elegy on the death of the learned and indefatigable POGGIUS, who first discovered and brought to light the manuscript books of Silius, about the year 1415, calls them *divina poemata*, divine poems.

Illius atque manu divina poemata SILI  
ITALICI redeunt, usque legenda suis.

See Roscoe's Life of Lorenzo de Medici. vol. i.

Hæredem Dominumque fui tumulique  
larisque,  
Non alium mallet nec Maro nec Cicero.  
Ep. 49. lib. cx.

Silius possessed of Tully's fair retreat,  
And Maro's tomb, adorned with pious  
care;  
Not Tully's self, nor Maro, should they  
meet  
On earth again, would choose a different  
heir.

In the following epigram (Lib. vii. Ep. 63.) Silius is more fully described and commended.

Perpetui nunquam moritura volumina  
Sili

Qui legis, et latiâ carmina digna toga;  
Pierios tantum vati placuisse recessus  
Credis, et Aoniæ Bacchica fæta comæ?  
Sacra cothurnati non attingit antè Maronis,  
Implevit magni quàm Ciceronis opus.  
Hunc miratur adhuc centum gravis hæsta  
virosum.

Hunc loquitur grato plurimus ore cliens.  
Postquam bis-fenis ingentem fascibus  
annum

Rexerat, asserto qui sacer orbe fuit;  
Emeritos Musis, et Phæbo tradidit annos,  
Proque suo celebrat nunc Heliconæ foro.

"In groves Pierian was thy sole delight,  
Immortal Silius!" would you fond ex-  
claim,

Whoe'er his deathless pages oft recite,  
And numbers worthy of the Latian name?  
Long did grave courts his eloquence ad-  
mire,

While grateful clients on his accents hung;  
To equal Tully's fame he dared aspire,  
Ere he the lays of lofty Maro sung.

When he the *fascēs* that proud year had  
borne

To Rome made sacred, from a tyrant  
freed;

The *Nine* below'd his well-spent years  
adorn,

And now to Helicon his footsteps lead.

The subject of the poem of SILIUS is the second Punic war, one of the most critical and memorable to be found in the whole Roman history. It is comprised in seventeen books, and has come down to us entire.\* It is alluded to in terms



of applause by Martial, (Lib. iv. Ep. 14.) who invites his friend to lay aside the severity of his epic muse, for those sportive diversions and pleasurable relaxations, often seasonable and salutary to those who court the muses; and compares himself to CATULLUS, and SILIUS to VIRGIL.

Sili Castalidum decus sororum,  
Qui perjuris barbari furoris  
Ingenti premis ore, perfidosque  
Fastus Hannibalis, levésque Pános  
Magnis cedere cogis Aficanis:  
Pallum seposita severitate. &c.

Silius! the glory of the Nine,  
(Nymphs of Castalia's fount divine)  
Who in thy deep majestic song,  
The frauds of barb'rous rage prolong;  
And bids th' inconstant punic race,  
Their leader's wily schemes and base  
All, all to the great Scipio's yield.

*To the Editor of the Monthly Magazine.*

SIR,

BEING too impatient to wait for the solution to the question I proposed to you sometime ago, about the wages due to me from A, B, and C, for sinking a well, I had recourse to my friend, Mr. Standard, (a gentleman supposed to have had much experience in the settlement of vulgar fractions amongst his neighbours) to compromise the matter in dispute for me. A, B, and C were accordingly summoned to appear, and after much altercation amongst themselves, it was proposed by Mr. Standard that each should call in an arbitrator, by whom the affair in dispute should be finally determined. X, Y, and Z, those poor but honest accomptants, were fixed upon, who determined that each should pay me in the following proportions.

	Dolls.	Cents.	Dimes.	
A	9	52	380	} 4
B	13	33	332	
C	17	14	284	

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And as there was a remainder of four trifles due to me from A, B, and C, it was determined that Mr. Standard should settle it as he thought proper; who, after rummaging among some musty books, which I took for old Almanacks, he retired a few minutes, and returned with a wooden instrument upon his shoulders, something in the form of two sugar-loves glued together by the thick ends, which he rolled several times backwards and forwards upon the edges of two thin boards, and acknowledged that he was convinced by the use of this most perfect of all mathematical instruments, that the remainder four was nothing: for he reasoned in this manner: what is too small to be divided cannot be divided; the remainder four is too small to be comprehended by our senses, and cannot be divided, *ergo* the remainder four is *nothing*. A, B, C, and myself were perfectly contented with this decision, but X, Y, and Z gave us all a smile of contempt, and retired.

ADAM WORKMAN.

*On the Use of MAIZE.*

*To the Editor of the Monthly Magazine.*

SIR,

I HAVE been much amused with your abstract from Rumford's essays, and particularly with his speculations on the uses of Indian corn or *maize*. Many conclusions of the highest importance to the welfare of mankind, are suggested by the facts which are stated by him; but in proportion as these conclusions are extensive and important, it behoves us to be careful that the facts from which they are deduced are ascertained.

Whether man may healthfully subsist upon Indian corn alone, and what portions are necessary to his daily subsistence, are questions to be decided only by experiment. To

try the experiment in our own person, is certainly the safest method; but to do this effectually would require a degree of self denial which few of us are able to practise. Count Rumford seems to think that this experiment was tried by himself, and proceeds to build conclusions on the facts which I am afraid are hardly sufficient to sustain them.

His experiment consisted in dining *once* on a given quantity of hasty-pudding. The usual interval between this dinner and his breakfast next morning, was spent, without any sense of debility, or extraordinary craving. Hence he infers that hasty-pudding might usefully constitute our only food, and especially the food of the poor.

On this case, however, several observations are to be made. In the first place, the effects of a single meal afford no proof of what we must expect from an invariable continuance of the same food. It would be quite as reasonable to infer, that food itself is unnecessary, since many men have fasted one, two, and three days, without apparent diminution of their vigour. Almost every man has lost a meal and a night's sleep, without sensible increase of appetite or drowsiness. The influence of food, like that of abstinence, is far from being always sudden or speedy. A change of diet and employment will frequently occasion a temporary buoyancy and exhilaration, though its ultimate and gradual effect is to undermine the strength and shorten life. A sense of fulness and vigour will often flow from the use of a liquid which stimulates without nourishing. This is eminently true with respect to coffee, which, it seems, composed the Count's breakfast, and which alone will sustain the strength of those who are accustomed to it, for twelve or eighteen hours.

This experiment was, in another

view, extremely delusive; for, had the effects of dining upon hasty-pudding been lassitude and craving till a new meal, the insufficiency of this kind of food would not thence follow. This is, on most occasions, the effect of withdrawing a stimulus to which we have been accustomed, though that stimulus is, generally and in itself, superfluous or pernicious. It is only by persisting for weeks or months in the use of the same diet, that either its good or bad tendency can be fully verified. Habit has tritely, though cogently, been termed a second nature, and must be gradually broken and subdued. The constitution does not instantly embrace a new law, and accommodate itself to a new regimen; and, as habit will frequently disarm the most poisonous material of its hurtful property when enlisted on its side, so the most wholesome aliment will be purely mischievous when unsupported by a league with habit. A man accustomed to inflammatory wines and condiments, to roast beef, mustard, and *brown-stout*, might naturally be expected to complain of languor and faintness, on changing his regimen to milk, fruits, or hasty-pudding. This change might, indeed, operate to his destruction, and yet be far from furnishing a proof that milk, fruits, and bread are poisonous or insufficient. If the change should prove ultimately beneficial, the benefit would be experienced by degrees and slowly. Healthful and benign feelings would be preceded by *inaction*, fits of lassitude, and, perhaps, by actual disease.

Opium and spirits, and tobacco, will become in like manner necessary to the constitution, and the disuse of them, in certain cases, will produce disease and death.

There is likewise another consideration proper to be mentioned. What is sufficient for the subsist-



ence of a man of one size, and one set of habits and employments, may not answer the exigences of another. The man of slender frame, quiet thoughts, and intellectual industry, may be expected to require fewer supplies than the robust and laborious classes of mankind. Count Rumford, all whose feelings are probably benign, and his exertions uniform, mental, and placid, would probably have appetites less keen, and a stomach less capacious than those of the carrier of burthens and the driver of plows. The latter might deem very slender and scanty fare what would amply satisfy the former. In every view, therefore, the experiment of this philosopher is insufficient to establish the conclusions for the sake of which it was made.

It is evident that the only illustrations of this truth must be gained from the practice of large numbers of mankind. Is there any laborious class of people whose subsistence is totally derived from maize? If there be such, in what proportions do they use it, and what is the apparent influence of this food on their constitution?

Maize is used by the natives of Africa, and by the peasants of Italy and Switzerland. Of many of these it probably constitutes the only bread; but none of them are wholly limited to maize, as food. It is always mixed with meat, or milk, or fruit, or oil, cheese, or wine, or it is used alternately with these. There are, probably, thousands of Savoyards and Tyrolese, whose meals have been composed of nothing but cheese, milk, rye bread, and pollenta. That these ingredients are sufficient to sustain, invigorate, and prolong our existence, there is no room to doubt; but whether bread alone, and bread made of maize, be sufficient for these ends, must be proved by other examples

—Perhaps such examples may be found in our native country.

It is well known that the staple production of North-Carolina, is maize or *Indian corn*. In some of the counties, as Chowan, Bertie, and Tyrrel, it occupies a larger share of the soil than in the others, but, in all, it is the chief product: and what is particularly to our present purpose, in all, it constitutes the *bread* of the slaves.

Slaves are every where treated with different degrees of severity. This severity principally consists in limiting the kinds and quantity of food. In this respect, as in all others, there is a mean, which there are a few who rise beyond, many who fall below. Maize is every where considered as the gross and regular subsistence of the negroes. Other vegetable products are sparingly or seldom added to their meal; and pork, or fish, or salt, is given, more to add a relish to their *hoe-cake*, than as an indispensable portion of their sustenance.

It is natural to suppose that the experiment which our philosopher has tried in so small a scale, would be frequently repeated by the avarice of slave-holders, on a larger one; and that we should find, on some Carolinian plantation, complete proof of the extent to which simplicity and abstemiousness in eating, may be carried. On making suitable inquiries, I have found that the mere use of Indian corn, sometimes occurs, but rarely; and that a land-holder is accounted barbarous and cruel beyond the customary degree, who confines his negroes to maize alone.

The most lenient and indulgent treatment consists in allowing each negroe, in addition to his maize, which, in this case, is ground and baked by slaves allotted for the purpose, as many salted herrings as he can eat, and twice or thrice a week

he is allowed to banquet upon pickled pork. A man, the limits of whose appetite are not prescribed by his master, will eat three herrings, each weighing four ounces, at a meal. He makes two meals per day. His meat therefore amounts, daily, to  $1\frac{1}{2}$  lbs. He has likewise a rood or two of land, round his hut, which he may cultivate on Sundays and holidays, in what manner he pleases. In this garden he raises potatoes, pease, beans, and the like, which greatly heighten and diversify his banquets, or which he exchanges for spirits, molasses, dainties, or cloathing. He will likewise raise a fowl or two, and will, sometimes, in conjunction with his fellow servants, perhaps, make out to rear an hog; which his master will give him the necessary means of pickling. In some cases, tasks are prescribed to the slave, which his industry may dispatch so as to gain a day or two in the week, to be employed for his own advantage.

This is the utmost limit of indulgence. The opposite extreme of rigour consists in abridging the negro of all leisure but that of Sundays and a few days at Christmas, and of dispensing, weekly, to each slave, eight quarts of maize, in the grain. They are driven to the field on Monday morning, and continue there, day and night, till Saturday evening. Besides their appointed tasks, they are to grind their corn, and prepare the meal, with water brought from a neighbouring spring, and at a fire kindled on the spot. They are utter strangers to flesh or fish, to every kind of condiment, even to salt. Their food is, absolutely and simply, Indian meal mingled with water. This is spread upon a board, and placed before the fire. The hoe, the usual instrument of their labour, has sometimes been made their instrument of cookery, whence has arisen the

term hoe-cake; but, in cases of extreme hardship, this office must be performed by a board, the hoe being in constant use till the moment of beginning their repast.

This description is by no means exaggerated. On the fertile banks of Roanoke, there are farmers who cultivate five hundred acres, and this is performed by eighty or one hundred slaves. The treatment of these slaves is far from being generally rigorous; but, nevertheless, there are some instances of barbarous severity. Every one acquainted with the country, will recollect more than one planter, who possesses between two and three hundred slaves, and whose provision is simply, and absolutely, and invariably, one peck or eight quarts of unground maize per week. This is ground, sifted, and eaten by the same persons, and is unaccompanied by flesh or fish, by molasses, sugar, and even by salt. This, therefore, may be considered as a complete instance of the exclusive use of maize.

In estimating the influence of this diet, we may be led, by attendant circumstances, into some errors. The rigour that is exercised with regard to food, extends to every other particular; to their dwelling, cloathing, tasks, and especially to punishments. These unhappy beings usually appear half naked, emaciated, and dejected. They form a melancholy contrast to the plump, spirited, and laughing figures, whom their good fortune has placed under a more lenient government. How much of this emaciation and dejection is to be imputed to the kind or quantity of their provision, it is difficult to ascertain.

I have described the limits of indulgence on the one hand, and of rigour on the other. There are, of course, numerous intermediate degrees. One of these degrees consists in dispensing, weekly, a fixed,



though limited provision. Herings constitute, always, a part of this provision; but the grain is never less than eight quarts a week. Hence it should appear that eight quarts, without any additional ingredient, are insufficient for wholesome subsistence.

Admitting, however, that with moderate tasks, with all the benefits of cookery, with comfortable cloathing and shelter, with intervals of leisure and amusement, eight quarts per week should be deemed sufficient, let us see what will be the amount of daily provision, and compare it with the experiments of Count Rumford.

	lbs. oz.
A bushel of maize (in grain)	
will weigh . . . . .	61 0
And produces, of meal, . . .	45 0
A peck, or fourth of a bushel, will, therefore, produce, of meal, . . . . .	11 4
This divided into seven portions, is, per day, . . . .	1 6
This will make, of hasty-pudding, . . . . .	4 8

Count Rumford informs us that he dined upon 1 lb. 1½ oz. of this pudding, so that the negro's daily portion of corn, would afford, if made into hasty-pudding, more than four meals equivalent to our author's dinner; a quantity, which, according to this estimate, ought amply to supply the daily wants of a single person.

It is not to be forgotten, however, that water, properly combined with other substances, has been proved to be eminently nutritious; and that hasty-pudding has a larger proportion of water than can be produced by any other mode of preparation. The negro is compelled to turn his meal into dough, and to bake it, without permitting fermentation, and as soon as it is made. By this mode, the benefits of cookery are almost wholly lost. Suppose, however, that the hoe-

cake retains as much air and moisture as well fermented bread. Meal, by fermentation and baking, is supposed to gain one third of its weight, so that 1 lb. 6 oz. of meal, will produce, of hoe-cake, 1 lb. 13 oz. which is but two ounces more than the product in hasty-pudding, of half a pound of meal. Hence it follows, that though the negroe may famish and die upon his daily allowance made into *hoe-cake*, the same portion made into *hasty-pudding*, might constitute an ample supply for two days. Hence we may infer the great importance of cookery.

These facts respecting the negro method of subsistence, may be deemed indisputably authentic. These, added to the facts stated by our author, will suggest many important conclusions.

In the first place, it is remarkable that the avarice of the Roanoke planter might be gratified without injury to his slaves, merely by a different and not more expensive preparation of their food.

These facts may likewise be made the basis of various calculations as to the productiveness of landed property, the benefits of predial slavery, and the possible bounds of population, the quantity of cultivable ground, and the degree of its fertility, being given.

Population, beyond most subjects, is involved in perplexity. Our ideas respecting its actual and possible state in any country are vague and indeterminate, in consequence of wanting a proper basis for our computations. This basis would, in some degree, be supplied by accurate conceptions of the capacity of certain products to sustain the life of man, and of the capacity of ground to produce these products.

There is found to be considerable difference in both respects. Soils, equal in fertility, will pro-

duce different quantities of different products. It will produce, for instance, more potatoes than maize, more rice than potatoes, more bread-fruit than rice, and more of sago than either. According to the plant which we cultivate, will therefore be the quantity of sustenance, and the possible limits of population.

Ground, consisting wholly of siliceous, calcarious, or argillaceous matter is wholly barren. It is fertile, on the contrary, in proportion as *mould* or vegetable earth predominates over the former substances. Ground, in our southern states, sometimes refuses to the cultivator, one bushel in the acre. The utmost degree of fertility, joined with the greatest care in the tiller, will scarcely produce seventy-five bushels. The most usual degrees of productiveness, are between fifteen and forty-five.

If one fourth be added to the portion allowed, according to the above statements, to the cultivators of the soil, and which must be granted to be sufficient for healthful sustenance, an acre producing fifteen bushels, will maintain a man, and one producing forty-five, will maintain three men. The medium, therefore, is thirty bushels, which may be fixed as the average fertility of cultivable ground, when devoted to maize, in any part of the temperate and torrid zones.

The *possible* population of a country may hence be inferred, having ascertained first the proportion of cultivable ground, and, secondly, the proportion of cultivable soil, to be employed in raising maize. If the numbers of any country be given, we may likewise hence compute the proportion of cultivable ground in the country necessary to their subsistence, provided that ground were devoted to maize, and provided, likewise, the maize were prepared in the most judicious manner for food.

PHILO-RUMFORD.

#### MEMOIRS of STEPHEN CALVERT.

[Continued from p. 282.]

I ENTERED Sydney's apartment in a state of perplexity and anger, which made me careless of all forms. Ideas floated in my brain which assumed no distinct shape, but they were connected with remembrances of Sydney's ancient pretensions to my cousin, and vague suspicions of malevolence or treachery.

He was sitting at a table, with books and papers before him. "So," said I, abruptly and advancing towards him, "here are mysteries which it must be your province to explain. Yesterday Louisa Calvert consented to become my wife, but to-day, it seems, she has changed her mind; and, she tells me, you have been the author of this change. You have urged reasons for not merely postponing our alliance, but even for wholly dissolving the contract. You will not be surprised that this disappointment should distress me, and that I should expect from you the reasons of so strange and unexpected, and, indeed, unwarrantable interference. What have you discovered to make my marriage with my cousin less eligible now than formerly? Till this moment, I have seen in your conduct, no marks but of approbation, and have relied upon you as my strongest advocate; but now, it seems, the tide has changed, and you have persuaded her to recall all her promises, and thwart every expectation of her friends."

During this address, Sydney's countenance became grave, but without embarrassment or dejection. After a pause he replied, in a sedate and mild tone, "It is true." There he stopped.

"True! But why have you acted thus? What objections have you found to this marriage? What



vices or enormities have you detected in me which unfit me for being the husband of Louisa Calvert?"

"No vices or enormities: nothing but the want of age and experience: but my objections are not limited to you. They relate chiefly to your cousin. Her qualities, in my opinion, make this alliance improper. It is more likely that misery will flow from it than happiness. I have endeavoured to convince her of this, and have, beyond my expectations, succeeded."

"Qualities in my cousin that make marriage improper? Pray, of what kind are they? They have entirely escaped my sagacity, and I should be grateful for the assistance of a friend in drawing them to light."

"I doubt much," replied he, unaffected by the ironical severity of my looks and tones, and eyeing me mildly and stedfastly, "I much doubt the fervency of your gratitude for a service like that; and yet I have no mean opinion of your generosity. You are passionate and headstrong, but there is, in your character, a fund of excellence, which, if not checked by untoward events, will hereafter render you illustrious. You have won my esteem, and I love you so much that I am willing to promote your happiness even at the expense of your temporary gratification. I would save you from an alliance which would operate to your mutual destruction."

These intimations startled me. I re-urged, in a milder tone, my inquiries into those defects in my cousin which were adapted to produce such disastrous consequences.

"It is useless to discuss them," said he: "instead of regarding them as defects, you will account them excellences, and excellences they truly are. Those qualities which have given birth to your passion, are the same which disqualify her

for being *your* wife. In proportion to her candour and benevolence, to her tenderness and constancy, is she unfitted for an indissoluble alliance with a youth, raw, unexperienced, with principles untried and unsettled, impetuous, versatile, liable each day to new impressions, and enslaved by a thousand romantic and degrading prejudices. I do not beseech your patient attention to arguments and exhortations. I do not seek to convince you that Louisa Calvert, in proportion to the purity and elevation of her character, is unfit to be your wife. By my conduct on this occasion, I expect only to excite your rage, and to draw upon myself your upbraidings and suspicions. If any other emotions were excited, my objection to the marriage would not have existed. It was agreeable, however, to my conceptions of duty, to act and to speak thus. I think I foresee all the consequences of my actions, and as this foresight has not shaken my purpose, these consequences, whatever they may be, will not molest my tranquillity."

It is impossible to describe the emotions which were produced by these words. A secret conscience whispered me that Sydney was right; that I was, indeed, that versatile, romantic, and ambiguous being which he had described; that the passion I had fostered for my cousin was built on inadequate foundations, was unsupported by congeniality of character, was more allied to the impulses of sense and to the instigations of vanity, than to any better principle. This whispering conscience, however, was scarcely heard, and its intimations were neglected. I viewed the subject not through so cold a medium. My desires, though ambiguous in their origin, and, perhaps, transient and mutable, were vehement, and acquired new strength from this unexpected opposition. These desires

dictated my opinions and my language. The interference of Sydney, in a transaction in which he had no direct concern, his attempt to controul his friend in a choice where her happiness alone was to be consulted, appeared to me audacious and presumptuous. I was likewise sufficiently disposed to question the purity of his motives, to impute his conduct to mean jealousy and rivalry. I did not hide these thoughts, and was, by no means, sparing of surmises and reproaches.

He listened to me with unaltered features. At first I was inclined to suppose that my reproaches had possessed some influence, but when I gave him opportunity to speak, he declared that the light in which his interference had been viewed by me, and the resentment which it had excited, fully agreed with his expectations. My reproaches argued all that impetuosity of temper which he had already, in the secret of his own thoughts, ascribed to me. It added, if possible, new force to his objections against any union between me and his friend. "Your errors," continued he, "are of no rare or prodigious kind. They are incident to persons of your immature age, and contracted experience, and secluded education. They entitle you to sympathy and succour from those wiser and older than yourself. I am your senior by a few years, and if I possess any superiority over you, am indebted for it to wiser instructors and larger observation.

"I have made no secret of the love which I once felt for your cousin. That love was founded on proofs of her excellence, which time has multiplied instead of lessening. That love, therefore, has not been diminished, but enhanced by time; but the happiness to flow from her union with me, must mutually exist, or it cannot exist at all. If undesirable, if unproductive of felicity

to her, it must cease to be desirable, cease to be productive of happiness to me.

"You imagine that my opposition has its root in selfish considerations, that I labour to prolong her single state, in hopes that time and assiduities will win her favour to myself. Even while you utter these surmises, you are doubtful of their truth, and you fully expect that I will earnestly assert the purity of my motives. These expectations will be disappointed. I am far from supposing myself raised above the frailties of my nature, that my conduct is exempt from all sinister and selfish biasses. I know that they sway us in a thousand imperceptible ways, that they secretly pervert those resolutions, and vitiate those reasonings which, to our hasty view, appear the most enlightened and benevolent. I claim no merit but that of honestly, and strenuously labouring to discover and exterminate the suggestions of self-interest. I know very well that I am far from constantly succeeding, and the detection of my own mistakes, is the irksome, but inevitable fruit of every new meditation.

"It is true that I love this woman; that no man on earth estimates so justly, and admires so fervently her virtuous qualities; that no one is so qualified to make her happy, provided love was not wanting on her side. I know that this love may, on some future occasion, start into being. Need I say that I desire this event? That I regard, with aversion, any obstacle to its occurrence?

"It is true that she loves another, that her heart is devoted to you. I am grieved that her heart is thus devoted. I would willingly free her from this inauspicious passion, and restore her to that indifference which I desire that she should relinquish only for my sake. I repine at her choice, because I am not the object



of it, but I should be guilty of falsehood and injustice if I allowed you to suppose that this was the *only* cause of my repining, and that hence only arose my opposition to your marriage. No; it is founded on accurate examination of your character, and proof which, to me, is incontestible, that the misery of your cousin, and your own misery, would flow from your alliance.

"You will imagine that prejudice and selfishness create, to my view, those disadvantageous qualities which I impute to you. I will not deny it. It is possible that I mistake your character. Hence the diligence of my scrutiny into your deportment, and into my own motives, has been redoubled. Hence my decision has been protracted, and my interposition been delayed to the present hour. Hence I have not, as you seem to think, advised your cousin to dissolve all connection with you, but merely to postpone her marriage for a few years, during which that steadfastness of views and principles in which you are now wanting, may be acquired by intercourse with the world, and exposure to its temptations and vicissitudes.

"You have hitherto dreamed away your life in solitude. You have no practical acquaintance with yourself, or with the nature of the beings who surround you. You have nothing but distorted and crude conceptions, and passions lawless and undisciplined. You are governed by the present impulse, rebel against all restraints, shrink from all privations, and refer nothing to futurity. Your attachments spring from vanity and physical incitements; they are transient as the hour, and variable with every variation in the objects which surround you. To link Louisa Calvert, by ties that cannot be unloosed, to such an one, would be devoting one being, whom I love beyond all man-

kind, and another, for whom, in spite of his defects, I have considerable esteem, to bitter regrets and incurable calamity. I cannot think of it."

These representations, urged with the utmost pathos and simplicity, produced a temporary effect upon my feelings. Without being convinced, I was at a loss for an answer. After a pause of some minutes, I left the house; and, returning to my lodgings, employed myself in revolving the topics which Sydney had urged.

The impression which his last words had made upon me, speedily vanished. The more I brooded on the subject, the more equivocal his motives, and fallacious his reasonings appeared. I began to see nothing in his conduct but the stratagems of a selfish competitor, and called up all my courage to the contest with him. To compel him to recal his prohibitions, was not possible. To betake myself to solicitations and intreaties, was sordid and dastardly. My genuine province was to change my cousin's resolutions by intreaties or arguments. In this task, I imagined that little difficulty would occur; and relied, for success, on my own talents, and on the warmth of her affection.

Shortly I obtained another interview. Her deportment was no longer the same. Instead of the cheerfulness, and even gaiety, by which she had been formerly distinguished, and manners flowing from the union of affection and candour, she was melancholy and full of solicitude, which she was at no pains to conceal. She eyed me with visible dejection and apprehension.

My discontents were sufficiently apparent, and augmented that anxiety which her conduct betrayed. A look, cast upon Mrs. Wallace, indicated her desire of conversing

with me apart. Her friend seemed acquainted with the new embarrassments which had arisen between us, and left us to ourselves.

As soon as we were left alone, my cousin placed her chair close to mine, and pressing my hand between her's, said, in broken accents, "You have been with Sydney. He has talked to you, but not convinced you. He has repeated your discourse, and I see, too clearly, the inefficacy of his reasonings. O! my friend! would to heaven you could think with him and with me! and imitate that self-denial which duty imposes on me."

"You mistake," said I impatiently: "*duty* would prescribe a very different conduct. Should you listen to *that*, a lesson would be taught you very different from the suggestions of envy and jealousy."

At these words, her countenance changed into some expression of resentment. She withdrew her hand from mine. This resentment, however, passed away in a moment, and resuming looks of kindness, she replied, "I can bear injustice when committed against myself. I can also bear it even when committed against my friend. You misapprehend the character of Sydney, and I ascribe that misapprehension to causes that do not make you culpable. You have not enjoyed the means of knowing him, and your equity is blinded by passion. The time will come when that blindness will be removed, and your confidence in his integrity be equal to my own."

"On this subject I desire not to reason with you; for reasoning will make no conquest of your opinions, but will expose my own resolutions to be shaken, and lessen my tranquillity. And yet I fondly cling to the hope that reflection will convince you of the rectitude of my scheme."

"Your scheme! I know not your scheme. What scheme have you adopted?"

"I have mentioned it once already. Spare me the anguish of repeating it."

"You have uttered doubts and surmises, but I know not what it is that you finally intend. I have, indeed, talked with Sydney, but I will not suffer him to be your representative, and the announcer of my fate. What is it that you determine with regard to me?" These words were uttered in a tone that excited the consternation of my cousin. She looked at me with streaming eyes, but without speaking.

"What is it," continued I, "you mean? To reject me? To banish me? What have I done to merit the treatment of an enemy? Have I failed in any point of respect to you, or to my mother? Have I violated any law? Have I offended, in any instance, against virtue or decorum? Has a single day brought forth such damning proofs of my depravity? What is the crime? Let me know it, and let me be confronted with my accuser. Save me from the odious necessity of imputing fickleness and hypocrisy to the object of my devotion."

"You have talked with Sydney, and must, therefore, know my resolution, and the grounds on which it is built."

"I know nothing from him but that I am a sensual, selfish, and hypocritical slave. That alliance with me will be, to Louisa Calvert, degrading and calamitous; that, instead of affection and esteem, I merit only to be detested and shunned. This, then, is the sentence you pronounce on me. He whom yesterday you loved beyond all mankind, in whose character you found no inexpressible blemish, and to whom you were willing to consecrate all your feel-



ings and wishes, has, to-day, become a being hateful or terrible. Make haste, I beseech you, to inform my mother of this change in your opinions. Shew her the extent of her error in imagining her son worthy of your esteem. Persuade her to despise me, to relinquish the hopes which she had formed of seeing my happiness and virtue established by union with you."

"Felix! this is too much from you. You have deceived my expectations. I had more confidence in your moderation and your justice. It is impossible that Sydney should have spoken thus. Heaven knows that my love for you has no wise diminished, that I esteem you as much as ever, but I deem it necessary to postpone an event which cannot be recalled, and to stay till your character is matured by that age and experience in which you are now deficient. And what—if your love be virtuous and sincere, what objection can be reasonably made to the delay of a few years? Your absence will improve your understanding, your morals, and your fortune, and will not bereave us of the advantages of a pure and ardent friendship. Communication, as frequent and copious as we please, may subsist between us. Mutual sympathy and council may be imparted; and, by the practice of self-denial, we shall insure our claim to future happiness."

These reasonings were but little suited to appease my discontents. I endeavoured to demonstrate the visionary folly of her scheme, and dwelt upon the pangs of that disappointment which she would inflict, not only upon me, but upon my mother. "You can scarcely expect," I said, "the approbation of my mother, whose fondest hopes, with regard to her son, have been fixed upon this alliance, and who

will charge you with caprice and levity."

"Indeed," she answered, "I fear her censure; but I confide in the candour of my deportment to prove to her, at least, the purity of my motives, though my arguments may fail to make any impression on her understanding. I will explain myself fully to her, and if I should be so unfortunate as to have offended her beyond forgiveness, it will, indeed, be a painful aggravation of my calamity, though it ought not to change a determination built upon such grounds as mine."

My vanity, as well as my passion, led me to imagine that my cousin's objections would easily be overcome. Her scheme appeared so wild and absurd, that I could scarcely argue with her patiently. It was modelling conduct by such artificial refinements and preposterous considerations, that it was more the topic of ridicule than ratiocination. Her purpose was so new, so remote from all her previous views, and so adverse to that scheme of happiness which she had formerly adopted with undoubting confidence, that I was prone to regard it as a kind of phrenzy, which might maintain its hold for a time, but which would speedily fall away of itself, if it were not removed by argument.

At present, little more was said on either side. I shortly after withdrew to ruminate on this strange revolution. The more thought I bestowed upon it, the more impatient and uneasy I became. My indignation and aversion, with regard to Sydney, increased. I began to suspect not only the disinterestedness of his conduct, but even that of my cousin herself. The change that had been effected, flowed, I imagined, from some unexplained cause, some cause which the parties were ashamed to avow.

This imagination was confused and wavering, but it gave birth to complaints and insinuations, which were heard with grief, and repelled or confuted with calmness and steadfastness. They were recounted in my presence to Sydney, on whom they appeared to excite no resentment, and whose deportment was unaltered by my reproaches. I was not studious of concealing from him my opinion of his interference. Finding his power over my cousin's sentiments was absolute, I laboured to convince him of his error; and, when arguments failed, resorted to the most pathetic intreaties. These, however, availed nothing, and our interviews always terminated in anger and upbraidings upon my side.

These obstacles added new fuel to the flame which consumed me. If my affections had been cold or neutral, previously to these transactions, their nature was now changed. The danger of losing this prize appeared to open my eyes to its true value. The thought of postponing our union for years, was equivalent to losing her forever. Nay, I derived more torment from these delays and suspenses, arising, as I conceived, from perverseness or caprice, than from our total and everlasting separation. My vehement temper pushed me forward irresistably to the goal of my wishes. I would not believe but that the attainment of this good was within my power. I would not believe that, should all my efforts be frustrated, I could endure to live.

The ardour of Louisa's sensibility was the advocate on whose assistance I relied. Nothing but perseverance in her new scheme created a doubt of the sincerity of her love. I had innumerable proofs of her tenderness, and, therefore, was confident of vanquishing her scruples.

No wonder that with an heart full of softness, compassion, and rectitude as her's, she should sometimes hesitate. My impetuosity overbore all resistance. While she listened to my pleadings, she was ready to yield. Frequently I imagined my success complete, and exulted in my happiness; but the scruples which disappeared in my presence were sure to be reinspired by a single conversation with Sydney. On repeating my visit, when every obstacle was supposed to have been annihilated, I was always fated to discover them anew.

These incessant disappointments took away my hopes. I had exhausted every expedient and argument in vain. Every new day shewed me that Sydney's power was not to be shaken. My confidence in my efforts languished and expired. I resigned myself to gloomy suspicions, sullenness, and utter dejection. My vivacity and smiling prospects were flown. I regarded myself as one unjustly treated and betrayed. I found a mournful satisfaction in secretly upbraiding the perfidy of Sydney, and the inhumanity and fickleness of my cousin. My visits to the Wallaces became less frequent; they were shorter, and passed without any conversation from me. They produced nothing but pain, and were willingly postponed or exchanged for the solitude of my chamber or the fields. I seldom failed to meet Sydney at his sister's; and the tranquillity of his deportment, and affectionate manner in which he continued to be treated by my cousin, I construed into insults upon myself. These mortifications I endeavoured to avoid by shunning the house.

My deportment, it was easy to see, was by no means regarded with indifference by Louisa. She eyed me, when present, with an air of ineffable solicitude. She could not



escape the infection of my sadness. Her attention was alive, as formerly, to all my looks and words; but the vivacity which they formerly inspired, was now changed into grief. When we chanced to be alone together, she expressed her tenderness and her regrets without reserve. On such occasions she renewed her declarations of confidence in the propriety of her deportment, and endeavoured to win my concurrence.

These interviews and these contests, by always affording new proof that her determination was irrevocable, became irksome. I ceased to contend with her objections, but listened, in a silent and sullen mood, to all she could urge. If an answer was extorted by her intreaties, my words were dictated by resentment. They charged her with unfeeling obstinacy and infatuation, with treachery to me, and ingratitude to my mother.

The last topic had always produced a more powerful effect upon her feelings than any other. She frequently confessed that her decision would be greatly, if not irresistibly, influenced by my mother's choice. She was inexpressibly anxious with regard to the light in which her conduct would be viewed by my mother. She had written a copious letter to her friend, in which she had explained the reasons of her conduct with the utmost simplicity, and endeavoured to prepossess her in favour of her scheme; insinuating, at the same time, that my mother's authority would be of more weight with her than that of any other human being; and that the imputation of error or ingratitude from this quarter, would be avoided by any sacrifice, and at any price.

The sentence which was so much dreaded by Louisa, was not, in the same proportion, desirable to me. I had other passions besides love,

and these lessened, though they did not annihilate the value of a gift, conferred, not from submission to reason or affection, but merely from deference to authority, and for the sake of avoiding unreasonable imputations. In truth, these imputations were not to be expected from my mother. After an intimation that her authority would prevail where her arguments failed, she would be anxious to maintain a neutrality. It was far from certain, that with a mind dispassionate, sobered by age, and prone to refer all events to their remotest consequences, she would not side with her niece, and fortify her present resolutions. Hence no hope was founded on my mother's interference.

This state, so fertile of calamity to me, could not long be endured. After musing on the same detestable impressions, and growing hourly more weary of their uniformity, my mind betook itself to the contemplation of that scheme which had formerly occurred to me with powerful recommendations, but which my engagements with Louisa had suspended. In the scene around me, there was nothing but provocations to melancholy. Every object reminded me of the blessing which an untoward destiny had ravished away, and contributed to deepen my gloom. I, therefore, determined to resume my ancient design of visiting Europe.

This design was strongly recommended by Sydney. It will appear to you by no means incompatible with the continuance of affection, and even of one kind of intercourse, between Louisa and I. To me, however, my departure was the extinction of all my hopes. Three thousand miles constituted an interval like death, and the absence of years was equivalent to eternity.

This design had been vaguely suggested by my friend, but she

had, by no means, insisted upon it. She seemed contented that marriage should be postponed, but regarded my voyage to Europe with a reluctance she was unable to conceal. On this head, indeed, Sydney's arguments had not produced the same conviction as on others. She could not see but that my present situation abounded with sufficient motives to virtue and trials of fortitude. That on the busy theatre of Europe, I should forget both her and my country, was not improbable; and this change was likely to banish all ancient impressions without reflecting any great degree of guilt upon me. This dread was confirmed by my own representation, which confounded the postponement with the dissolution of the contract, and my assertions that if I left my country, it would be with no design of ever returning. Her knowledge of my mother's views, who was, for various reasons, an enemy to this design, augmented the reluctance which she felt to concur in it.

Her aversion to my voyage, operated, in some degree, as an argument in its favour. I conceived that though she had resisted every other plea, it was possible that she would revoke her determination, if that alone would detain me. At all events, residence in my native country was grown intolerably irksome, and I resolved to stay on no condition but that of her immediate compliance with my wishes.

The arrangements necessary to my departure were easily made. Having fixed the day of my sailing, and made suitable preparation, I determined to pay my cousin a last visit, and exert all the powers of which I was possessed, to vanquish her scruples. I resolved to recapitulate and enforce every argument which had hitherto been urged, and to offer her the alternative

of accepting me, or of seeing and hearing from me no more.

It happened, seasonably for my purpose, that, about this time, Louisa had gone a few miles from the city, on a visit to a venerable lady, who usually passed her time without company or any species of amusement. Louisa proposed to spend two or three days with this person, during which no other visitant was likely to intrude. Sydney, too, was called by some engagement, to a distance, and would not, therefore, be at hand to counteract my efforts. I designed to go to this house, in the evening, and taking my cousin apart, make a final and vigorous effort in the cause of my happiness.

For some days previous to this interview, my thoughts were full of tumult and impatience. I was fully aware of the importance of my undertaking. On the success of this interview depended the condition of my future life. According to the event which should then take place, I should either be blessed with the possession of this woman, I should continue in my present abode, in the discharge of dutiful offices to my mother, in the enjoyment of conjugal felicity, and the improvement of my patrimony, or I should wander, homeless and unattended, through the world. I should separate myself forever from my family, my friends, and my country, and should seek, in a distant land, a new society, new enjoyments, and new motives. My sanguine temper led me to anticipate success rather than failure. When I reviewed the proofs of tenderness which I had received from my cousin, of the reluctance with which she admitted the possibility of my voyage, and the intrinsic force of the reasons which I should be able to alledge in favour of wedlock, and the favourable circumstances,



the lonely and solemn season when our interview should take place, and especially the absence of Sydney and Mrs. Wallace, who had hitherto been strenuous adversaries of my cause, and without whom none of these impediments would ever have subsisted, I trusted that I should extort from her some avowal or some promise, which she should be unable to recal.

The day, so momentous to my

happiness, at length arrived. I was not sorry to find it dark and inclement. Storms would increase the probability of finding her alone, and add to the solemnity of our meeting. I designed to wait till night-fall, and then repair to her dwelling, whence, if my attempt should not succeed, I would hurry to New-Castle, where lay the vessel in which I intended to embark.

(*To be continued.*)

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## American Review.

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### ART. XVIII.

SERMONS, by Samuel Stanhope Smith, D. D. *President of the College of New-Jersey.* 8vo. pp. 437. Newark. Halsey and Co. 1799.

WE remarked, with pleasure, in a former article of our review, that American divines were beginning to vie with their European brethren, in this species of composition, at once so difficult to execute, and so useful in its tendency. This is one, among many other symptoms, of the increase of that literary independence, which it must gratify every friend of our country to see advancing. Our progress toward this desirable point, has been as rapid as could reasonably be expected; and, perhaps, there is no one class of our citizens who have contributed more to promote this progress, than the clergy. We believe it may be asserted, that a larger portion of reputable American achievements, in the field of authorship, have been accomplished by persons of this profession than of any other in the United States.

We opened the volume before us with no small expectation. The celebrity of its author led us to an-

ticipate much pleasure in the perusal. The selection of subjects increased our hopes of finding considerable instruction and entertainment from the work. And, we will add, the language of the preface induced us to suppose that Dr. S. had presented the public with a specimen of pulpit eloquence of a very superior kind. How far our anticipations have been realized will appear in the sequel.

The volume comprises sixteen discourses, on the following subjects, viz. I. and II. on the causes of infidelity. III. on the dangers of pleasure. IV. on the rich man and Lazarus. V. on the penitent woman at the feet of Jesus. VI. on industry. VII. on the Lord's Supper. VIII. on the influence of reflection and sacred reading. IX. and X. on the forgiveness of injuries. XI. on the pleasures of religion. XII. on secret faults. XIII. on public vices. XIV. on death. XV. on the last judgment. XVI. on the happiness of good men in a future state. Of these discourses three had been before published in a detached form: the rest now appear for the first time from the press.

In the discussion of the above subjects Dr. S. displays but little

originality. It is, indeed, peculiarly difficult for the Christian divine, at the present day, to offer any thing *new*, either with respect to sentiment or the mode of illustration. Almost every branch of the various systems of theology and morals, has been so repeatedly and ably treated by eminent writers, that we can seldom expect more than the repetition of familiar truths, in a pleasing and interesting manner. Accordingly our author tells us, that his principal aim, in the composition of these discourses, was to accommodate himself to the reigning fondness for elegance of stile—"to give the grace of novelty to old and trite truths, and to add the decent and lawful embellishments of art to the simplicity of the gospel." In this design, we think he has, in some measure, succeeded. He writes in a manner considerably above mediocrity. He selects, in general, the most important and interesting topics which arise out of his respective subjects. His arrangement is natural and judicious. He always preserves that seriousness and solemnity which become the pulpit. And his stile is laboured to an unusual degree.

Those who can relish nothing in sermons but profound theological discussion, will find little to gratify their taste in this volume. Those who are pleased only when a preacher occupies himself in explaining, defending, and applying the peculiar doctrines of the gospel, will not derive much pleasure from the discourses under consideration. Dr. S. seldom wanders into the regions of polemic divinity. He rarely attempts close and profound reasoning. The distinguishing doctrines of christianity he glances at only in a cursory manner: and he does not frequently employ proofs or illustrations drawn from scripture. But those who are fond of discourses on moral duties—those

who can relish religious truth only when it is exhibited in a neat and decorated manner, and who loathe a large portion of evangelical plainness, will read these sermons with considerable gratification.

Though Dr. S. as we have already intimated, seldom dwells on controverted points of religion, yet, from the complexion of the sermons before us, we infer that he is a moderate *Calvinist*. He frequently, however, introduces, and appears peculiarly fond of one idea, which we feel rather at a loss how to reconcile with this creed, viz. that "sentiments of religion and piety are by nature deeply rooted in the human heart, and that it requires time, and a long indulgence in vicious habits, entirely to eradicate them." We do not design to call in question the truth of this opinion, but only to declare, that we see not how it can be rendered consistent with the other parts of that theological system which our author appears to adopt. If Dr. S. means that there is, in all men who have received any moral instruction, more or less of a natural conscience, he is doubtless consistent with himself; though even in this case it were to be wished he had been more precise in his expressions. But if any thing farther be intended, we are unable to discover its coincidence with the doctrines of the original depravity of human nature, and the indispensable necessity of divine revelation and divine grace, to bring men to the knowledge and love of truth, which seem to be taught in other parts of this volume.

In connection with the above, we cannot forbear remarking on another passage, which appears to be open to the same criticism. In the 136th page the author expresses himself in the following manner: "It requires, indeed, an arduous conflict to subdue the burning impulses of a heart too sensible to pleasure,



and to divert its force from the gross and turbulent pursuits of sense, to the pure and spiritual enjoyments of piety. But if it be arduous, blessed be God! it is not impossible to the energy of reason, to the power of reflection, to the sacred importunity of prayer." Does Dr. S. mean to say, that the "energy of reason," and the "power of reflection," can sanctify the heart of man? Does he mean to represent them as agents who are able to purify the polluted recesses of the depraved mind, to curb irregular appetites, and to restrain the impetuosity of passion? We repeat, that we do not consider it as our province to settle questions of *orthodoxy*; but the most careless reader will perceive the importance of an author expressing himself in a definite, consistent manner, and being well understood, on a point so fundamental in its nature, and so extensive in its relations.

Dr. S. informs us, in his preface, that from an early period of his life, he has admired the fervour which characterizes the sermons of the French preachers who flourished at the close of the last, and the commencement of the present century; and that he aimed to transfuse, in some degree, this character of their sacred eloquence into his own discourses. We also have some acquaintance with the French preachers of the period to which Dr. S. refers; and we have often, with him, admired that conspicuous attribute of their compositions of which he speaks. But the "transfusion of their manner" into this volume, in any considerable degree, has, we confess, escaped our observation. We discover, indeed, in many instances, an *imitation* of those celebrated christian orators; and, perhaps, in some cases, Dr. S. has even improved upon their sermons, with respect to *matter*, and made his own, on the same subjects, more

replete with weighty and important sentiment than theirs. This was an easy task, considering that he had theirs before him, and considering also that instruction, strictly so called, was by no means their primary object. But we see few passages in the volume before us, which will bear an advantageous comparison, in any other respect, with the pages of *Bossuet*, *Massillon*, *Bourdaloue*, or *Saurin*; and we think it was injudicious to invite such a comparison. In our author's manner, there is an occasional display of fervour; but it looks more like the fervour of art than of nature. There is much use of apostrophe and interjection; but little of that genuine ardour which indicates and awakens deep sensibility. The artifices of the orator too often arrest the attention, when the *subject* should be made to occupy the whole mind. We discover efforts to be animated, instead of that real pathos which melts, and that sublimity which transports the soul.

In this collection, we notice a remarkable, and, in some instances, we think, a very faulty repetition of the same ideas, in the same discourse. This observation applies, with peculiar force, to the first in the volume; in which one of the leading sentiments is presented in so many different forms, and so many changes are rung on the same thought, that, though it be admitted to be just and highly important, it becomes, at length, fatiguing to the reader. Perhaps, when sermons are actually delivered from the pulpit, an occasional repetition of this kind may not be improper. It sometimes, indeed, becomes necessary, in order that the hearer who bestows least attention, may not be suffered to lose sight of the most important points in the subject discussed. But in printed discourses, where the reader has time to dwell

and meditate on each sentence, and where the great difficulty is to find room, by sufficient condensation, for the numerous ideas which crowd from every quarter, we think much repetition should be avoided.

We have already spoken with respect of the style in which these discourses appear. It is neat, perspicuous, and popular. Considerable pains have been obviously taken to embellish it; and we frequently meet with great felicity and energy of expression. But it is too generally artificial, stiff, inharmonious, and often incorrect. We are sensible that the task of mere *verbal criticism*, is neither a very dignified nor pleasant one. But, perhaps, the present case is one of those which, for several reasons, demand some attention to it. When an author repeatedly, and formally, professes to have paid particular attention to this point, it would be injustice, both to him and the public, to pass it over in silence. We would, therefore, take the liberty of recommending to the revision of Dr. S. the following expressions. The list might have been greatly enlarged, but it is sufficiently long for our purpose.

Page 4, preface—"As far as I have been able, I have studied to unite the simplicity that becomes the pulpit, *along* with a portion of that elegance *that* is now so loudly demanded in every kind of writing." Page 5, "Sometimes another may have so happily *hit off* an idea, that he would not wish to change it," &c. Page 8, "The spirit of retreat, of devotion, and of heavenly mindedness, which the gospel enjoins, *revolts* those whose hopes and enjoyments centre only in this world." Page 11, "They find doctrines in the gospel that *revolt* their reason, and on these they incessantly declaim." Page 122, "Small cause have we for boasting, or confidence in that spark of reason, *that*, struck out of darkness but a moment since, by

the hand of the Almighty, is hardly sufficient to *guide our path* through this world; but to futurity, and the highest objects of our interest and duty, is wholly *blind*." Here reason, in one branch of the sentence, is represented as a *spark*, and in another, the figure is completely broken by giving it *eyes*, and converting it into a *perceptive being*. Page 148, "Idleness *degenerates* every thing; and mere amusement, where it occupies a large portion of our time, *evaporates* the greatest and most respectable qualities of human nature." Page 277, "Religion offers the highest satisfaction to the *mind*—it yields the purest pleasures to the *heart*—it introduces serenity and peace into the *breast*." These are the principal divisions of the discourse on the *pleasures of religion*. Are the *mind*, the *heart*, and the *breast*, different things? Dr. S. indeed, sufficiently explains his meaning in the illustration of each head; but is he accurate in the use of terms? To close the catalogue, we often meet with such expressions as these, "Shortly *about* to appear"—"*Internal* law, *in his own breast*"—"*Illy* instead of *ill*—and *that* almost universally instead of *which*."

On the whole, we consider these discourses as a valuable addition to the stock of American sermons. They contain much important truth, and afford some specimens of good writing, and of real eloquence. And we hope, to adopt the words of our author, that they will "gain an access for the substantial truths of religion, to the hearts" of many who could hardly be induced to read sermons of a different kind. But we should be sorry to see them held up as a model for imitation. We should hope the public taste would call for a larger portion of the simplicity of nature, and the weight of solid instruction. And we have no hesitation in declaring, that although we admire the spright-



liness and fervour of those great examples for which Dr. S. has professed a partiality, and although we lament that there is so great a deficiency of these qualities in our sermon writers, yet we should lament still more to see a fondness for declamation and meretricious ornament, excluding from our pulpits the sound reasoning, the unaffected dignity, and the substantial worth of a Tillotson, a Sherlock, a Clarke, a Walker, and a Witherspoon.

We think the following quotations afford, by no means, an unfavourable specimen of our author's style and manner. Page 70, sermon "On the dangers of pleasure."

"Moderation and self-denial are not less necessary to the true enjoyment of pleasure than to the proper government of ourselves. When pleasure is the sole object of pursuit, its enjoyments soon grow insipid by excess. The appetites precipitate themselves upon indulgence, and weary themselves with delight. Hence their gratification is often dashed with disgust, and often followed by remorse. Abstinence is necessary to restore the tone of nature, and to create the highest relish even of the pleasures of sense. When useful employment makes up the main business of life, those moderate and lawful enjoyments that are interposed to unbend the spring of the mind, are tasted with the purest and most exquisite satisfaction. And if occasionally we retire to the house of mourning, its affecting scenes are calculated to nourish that tenderness and sensibility of heart which is the happiest soil in which to plant all the moral, sentimental, and social pleasures.

"An important quality in the government of ourselves, is the power of firmness and constancy of mind in enduring the necessary evils of life. Youth, who have always been flattered and softened by pleasure, who have had every desire gratified as soon as it arose, who have hardly known what disappointment is, are little prepared to encounter those adverse events of Providence, which sooner or later must present themselves to every traveller through this mournful and uncertain pilgrimage.—However serene and pleasant the morning of life may commence, clouds will often overcast the day,

or will most certainly cover the evening with darkness and gloom. If your path now winds along a smiling plain, in the midst of flowers, it will soon lead you into a barren desert, filled with briars and thorns, or present to you frightful precipices from which you will hardly escape. Disappointments you must meet, mortifications you must endure, distressful reverses you ought to expect. What affliction are they preparing for themselves who now will dwell only in the house of feasting? Constant pleasure induces a weakness of mind that augments the pressure of the multiplied and unavoidable calamities that belong to our state. In that case, unlooked for reverses will overwhelm you with a dreadful weight—if you would act your part with dignity in the world, and not weakly sink under its misfortunes, accustom yourself to look forward to its charges, and seriously to consider the mixed condition of human life. Early learn to forego your own inclinations, when duty requires it; and to preserve them, at all times, under the perfect controul of reason. Often enter into the house of mourning, and there meditate on the dark scenes of human nature. Visit the receptacles of poverty and want—attend the couches of disease and pain—listen to the sighs of the friendless and the wretched—look on the melancholy trophies of death—let the cries of mourners who lament the loss of all that was dear to them on earth touch your sympathy—reflect on the tears that are shed in secret, and on the thousand nameless griefs that wring the hearts of the unhappy. By scenes like these chasten yourselves, and, by becoming familiar with affliction, prepare your mind with fortitude to meet those changes which may be reserved for you in the course of divine providence. If it should please God to cultivate your patience and constancy in the school of suffering, regard it as a proof of his paternal care. Every such trial will be disarming for you the force of those great calamities that sink feeble minds to the dust, and preparing you, with calmness and resignation, to approach the close of life, a period so formidable to the soft and guilty sons of pleasure.—The grace of God, sanctifying the heart, and cultivating within it the hope of a blessed immortality, is the only effectual preparative for a peaceful and happy death. But the Holy Spirit uses as valuable and necessary auxiliaries of his influences, the

affecting meditations, and the self-denying duties which I have here recommended. Certain it is, that those who form to themselves the most flattering prospects in the house of feasting, and cherish only those gay hopes that are apt to brighten upon them there, must, in the progress of life, meet with many cruel and overwhelming disappointments, which they will, by no means, be prepared to endure.

"Without a firm and steady self-command, and many self-denials, no great attainments can be made in the best and most valuable qualities of human nature. When pleasure is left to form the character, it soon destroys whatever is amiable or respectable in youth. See a young man who has pursued only fashionable amusements! What frivolity, what ignorance, what conceit, what inanity mark his character, and render him contemptible in the esteem of the wise and good! What an unfurnished mind! what useless talents! what an insipid and unsteady heart! But if he has plunged deep in the stream of pleasure, frivolity and unsteadiness soon become its lightest faults. Loaded with treachery, deceit, and every baseness, it hastens to sink into the dregs of vice. If the bloom and vivacity of youth should cast a veil over these defects for a time, what insignificance, what contempt are they preparing for age!—what melancholy and gloom for declining health, and impotent years!—what bitter, and, at the same time, what vain repentance for a dying bed!"

We perused, with pleasure, the following passages in the discourse "*On Industry*," which was particularly addressed to a class of students at *Nassau-Hall*, page 159.

"You have now finished the usual course of studies in this seminary; but you have as yet only entered on the threshold of the temple of science. You have completed some years of laborious and honourable application to letters; but if you would arrive at eminence in your respective destinations in future life, your labours are only just beginning. It would be the effect of unpardonable vanity, and the proof of mispent time, or of defective talents, to suppose that your acquisitions hitherto were more than the most simple elements of science, and humble handmaids to future improvements. Ignorance alone is easily satisfied with its own attainments, be-

cause it sees not how much is to be known. Real knowledge, by elevating the mind to higher ground, enlarges its horizon, enables it to discern innumerable openings into the distant and boundless fields of nature that yet remain to be explored, and, therefore, humbles it with a discovery of the small progress it has already made. You have hitherto gained little, if you have not acquired habits of application, a taste for letters, and an ardent thirst for improvement. With these qualities, what you have attained will prove an useful introduction to the great circle of sciences, and enable you to direct your own future progress in study. Without them you may lose even what you have gained. For, in the steep and arduous road of science there is no point of rest. Unless we advance we necessarily go backwards.

"Industry will be essential to your success if you would rise to eminence in any liberal profession, or serve your country with distinction in any respectable department of church or state. One or another of these objects, I presume, is your aim. I will not suppose that any of you, after the opportunities you have had to elevate and enlarge your views, to refine your sentiments, and to prepare to act an honourable part on the theatre of public life, can prove so unworthy and degenerate as to be contented to drag through the inferior grades of society, useless and undistinguished, and to yield the palm of excellence and merit wholly to others. Shall indolence hereafter destroy the hopes of your parents, the expectations of your country, your own honour, and that high respect which the elevated and virtuous mind ought to have for itself? Shall the degrading love of ease and pleasure, like a blighting mildew, blast your improvements in the bud, and prepare for you a manhood unfruitful of honour, and an old age, if you should live to see old age, vacant of rational and virtuous enjoyment, and stripped of the homage due to useful and well spent years?"

"You now stand on an eminence from which you should look forward to the period when you shall be ranked among the future legislators, magistrates, or interpreters of the religion, or the laws of your country. When you look through the whole compass of science, by a general acquaintance with which you should prepare yourselves for the discharge of offices so arduous and important, what



assiduity and perseverance will even your preparation for public life require?

"The time has been in this country when a smattering of knowledge, aided by some sprightliness of natural parts, would frequently secure to a man in the liberal professions both distinction and fortune. That time is nearly past. And, by reason of the more general diffusion of learning, and the growing multitude of rivals in every art, and competitors for every office, more solid acquirements, and higher qualifications will every day become more necessary for success.

"Besides, a mere theologian, or a mere lawyer is an inferior character, and not of difficult acquisition. But to be able to illustrate the sacred writings by all the aids of philology, of antiquities, of criticism, of eloquence, and philosophy—to be the interpreters of justice by a familiar recurrence to the pandects and codes of the most enlightened nations—to draw political wisdom from the history of ages, from an extensive knowledge of human nature and human society, and from so many sages who have written profoundly on that science, this is an arduous labour—this is a character venerable by its powers, its virtues, and its usefulness; and it is the only one worthy of a generous ambition, or the noble desire of doing good."

#### ART. XIX.

*Transactions of the American Philosophical Society, held at Philadelphia, for promoting useful Knowledge. Vol. iv. 4to. pp. 530. Philadelphia. Dobson. 1799.*

THIS collection is introduced by a catalogue of premiums proposed for the best performances on certain subjects, and for certain inventions and improvements, connected with the promotion of knowledge and happiness. These premiums were proposed in May, 1796; none of them have been hitherto awarded, except the first, which was adjudged in December, 1797, to the authors of two treatises on education, S. Knox and S. H. Smith.

The six remaining subjects relate to improvement in agriculture, æconomics and the arts. Means of preventing the premature decay of peach-trees; the best model for stoves or fire-places; an easy scheme for computing the longitude at sea; some improvement in the structure of ship pumps and of street lamps; and experimental information on American vegetable dyes. The communication of papers, on these subjects, was limited to a period that is now past, but as the premiums are not yet adjudged, it should seem, though it be no where directly expressed, that competitors are still admissible.

A donation, by Mr. De Magellan, of two hundred guineas, has been vested in funds, for rewarding the author of any improvement or discovery in navigation and natural philosophy. The premium consists of a gold plate of ten guineas value.

These statements are followed by minutes of transactions, by lists of new members, and of presents made to the society; among which are many valuable publications, foreign and domestic, and some curious specimens of Indian antiquities; and by a circular letter requesting information with regard to the natural history and antiquities of America.

The essays in this volume are seventy-six in number. They are extremely miscellaneous, but are limited, with two exceptions, to physical and mathematical subjects.

The mathematical papers are the following:

*To determine the true place of a planet, in an elliptical orbit, directly from the mean anomaly, by converging series. By David Rittenhouse, L. L. D. &c.* This is an abstruse process, and is not susceptible of abridgement.

*Method of raising the logarithm of any number immediately. By the same.* This method is concisely

explained in words, and illustrated by a copious example in figures.

*A letter from Mr. Andrew Ellicott to Mr. R. Patterson, in two parts.*

*Of the aberration of the stars, nutation of the earth's axis, and semi-annual equation. By the same.*

*A method of calculating the eccentric anomaly of the planets. By the same.*

*Observations made at old French Landing at Presque Isle, to determine the latitude of the town of Erie. By the same.*

The first of these papers consists of astronomical observations, made on different occasions, by Messrs. Ellicott, Ewing, Madison, Hutchins, Rhittenhouse, Page, Andrews, and Lukens. By some of these, the westward extent of Pennsylvania, from a point on the Delaware, was found to exceed  $5^{\circ}$  of longitude, by  $1'' 7''' 5$ . The southern boundary of that State, formerly, in part, marked out, was completed. This line is in the parallel of  $39^{\circ} 43' 18''$  north latitude. Mr. Ellicott next recounts the observations made to trace astronomical lines for the western and northern boundaries of Pennsylvania. This is followed by an account of the method used to lay out the federal territory of one hundred square miles, and the plan for the city of Washington. The bounding lines of this territory run north-west and north-easterly, are opened forty feet wide, and marked with mile-stones, on which the magnetic variation, taking place at the spot of each erection, is inscribed. In executing a plan of the metropolis, meridional lines, intersecting each other at right angles, at the area of the future capitol, were drawn to opposite extremities of the city, and formed the basis on which the rest of the plan was chiefly executed. The parallels were laid off with wooden rods, duly graduated and rendered always horizontal by plummets and sliders.

The second memoir relates to a curious particular in the planetary system, namely, the aberration of the stars, occasioned first by that proportion which exists between the velocity of the earth's motion in its orbit, and the velocity of light; and, secondly, by the nutation of the earth's axis, flowing from the unequal action of the moon on the equatorial diameter of the earth, in consequence of the retrograde revolution of the lunar nodes. The methods of correcting these inequalities are copiously explained; but a plate of the figures, to which frequent and minute references are made, nowhere appears. This omission is not accounted for, and is productive of much embarrassment to the reader, whose imagination is not strong enough to supply the deficiency. This memoir concludes with a mode of computing the effects of unequal solar action, between the solstices and equinoxes, on the earth's equatorial diameter.

Mr. Ellicott's third paper, (No. VIII.) respecting the eccentric anomaly of the planets, is imperfect from the want of figures. The plate is carefully referred to in this essay, but is omitted in the volume in this as in the former case.

The observations contained in the fourth paper were made to discover the latitude of the town of Erie, on the lake of the same name, which is fixed at  $42^{\circ} 8' 14''$  north. The magnetic variation, at the same time and place, was  $0^{\circ} 43'$  east.

The papers relative to improvements in machinery are the following:

*On the improvement of time-keepers.*

*By David Rittenhouse.*

*On the expansion of wood by heat. By the same.*

In the first of these papers is explained a contrivance for correcting inequalities in the motion of pendulums, arising from the variable density of the air. This inequality



is very slight, being not imagined to exceed, in the case of leaden pendulums, half a second in twenty-four hours. The mode of curing this error we cannot perfectly comprehend, from the want of a plate, to which, indeed, the writer refers, but which the volume does not contain.

In the second paper the author points out another source of inequality in the motion of pendulums, namely, the tendency of heat and cold to expand and contract the substances of which they are made. To remedy this evil, some have substituted wooden rods, which have been supposed to be exempt from this influence, in place of metallic ones. Mr. Rhittenhouse, by suitable experiments, however, has discovered that wood expands with heat, though in a much less degree, than metals or glass, and that this expansion is irregular, corresponding partly to the warmth, and partly to the moisture of the atmosphere.

Mr. Collin (No. XV.) has described *a machine for rescuing persons from the upper stories of houses on fire*, which seems well adapted to the purpose. The description, being illustrated by a plate, is sufficiently clear. The structure is simple, but from the inevitable cumbrousness of the machine, from the urgency of those occasions on which it would be necessary; and, also, from the rare occurrence of such occasions it will not probably be ever introduced into use.

*A method of adjusting the glass of Hadley's quadrant on land, for the back observation.* By R. Patterson. This mode is cheap, simple, and easy, and is accurately explained.

*The general principles and construction of a submarine vessel.* By Dr. Bushnel of Connecticut, the inventor. Means have been contrived for moving about in the air, which, however imperfect at present, may possibly be hereafter

brought to perfection. Nothing in this way remained, but to provide a method of moving about *under water*, with as much safety and celerity as upon its surface. Dr. B.'s machine is designed for this end. We discovered, with some regret, that the purpose of the inventor, was merely a warlike one; and, indeed, it does not seem adapted to any other purpose.

Strong objections may be urged against any machine intended merely to facilitate the destruction of our fellow beings. It is obvious, indeed, that partial and temporary benefit may sometimes arise from such inventions, as long as the knowledge of them is confined to one party in the contest, and that party be the *weaker* and the *injured* party, but this benefit is necessarily short-lived. The knowledge is quickly diffused throughout the world, and the general cause of humanity is nowise promoted. It is humiliating to reflect, that thirst of blood and lust of dominion, have been the great spurs to human ingenuity; and that *floating cities*, telegraphs, balloons, and submarine vessels, gunpowder and unquenchable fire, have been merely employed to mangle the limbs, pollute the morals, and destroy the happiness of mankind.

As to the *perfection* of this machine, a cautious observer will not be seduced by any plausibility of description, and will rely upon nothing but experiment. Some experiments are recounted by Dr. B. which, unluckily, did not succeed; though it must be acknowledged that their failure seems more owing to unskillfulness or accident, than to any inherent or incurable defects in the machine itself. There is little doubt but that experience and ingenuity, would carry this machine to the highest pitch of improvement.

Of a very different kind is the

*improvement* which Mr. Jefferson describes (No. XXXVIII.) in the *mould-board of ploughs*. The use of the mould-board is to receive the sod when loosened by the plough-share, and to turn it over. This end should be effected by the *least resistance possible*; and the improvement described in this memoir, is intended to realize this property. The omission of the plate, necessary to make the description intelligible, is to be much lamented.

(To be continued.)

#### ART. XX.

*The Nature and Danger of Infidel Philosophy, exhibited in two Discourses, addressed to the Candidates for the Baccalaureate, in Yale College. By the Reverend Timothy Dwight, D. D. President of Yale College. 8vo. pp. 95. New-Haven. George Bunce. 1798.*

WE learn, from an advertisement prefixed to these discourses, that, in Yale College, it is customary for the President, or the Professor of Divinity, to address a discourse to the candidates for the Baccalaureate, on the Sabbath preceding the public commencement. The discourses under consideration were delivered, on this occasion, to the class of young gentlemen who graduated September 9, 1797, and have been since published at their request.

Dr. D. takes his subject from Colossians ii. 8. *Beware lest any man spoil you through philosophy and vain deceit, &c.* In a judicious and appropriate introduction he observes, that the object of the text is not that philosophy which consists in the use and attainments of reason. This he highly respects, and warmly recommends. But that false and insidious philosophy which opposes the gospel, and which seduces from

virtue and happiness. With respect to this philosophy he undertakes—

- I. To prove that it is vain and deceitful.
- II. To shew that the young and inexperienced are in great danger of becoming a prey to it; and,
- III. To guard them against it by several arguments.

Under the first of these heads Dr. D. proposes to demonstrate, that anti-christian philosophy is utterly incompetent to teach us the character and will of God; that its doctrines are, in a high degree, discordant and contradictory; that its principles are grossly and shamefully immoral; and that it is totally inefficacious to reform the lives of those who espouse it. In illustrating these several particulars, he enters into a minute examination of the opinions of ancient philosophers and modern infidels, and displays the influence of their opinions on their tempers and lives. This picture is drawn with a strong, discriminating, and masterly hand. Infidelity is made to appear a deformed, odious, and self-destroying monster. And a list of absurdities and contradictions is produced from its boasted stores of wisdom, which cannot fail to shock and disgust the reader.

How far the statement which Dr. D. has given of the opinions of certain infidel writers is impartial, we will not undertake to decide, not having at hand all the works which would be necessary for a full review of the subject. But we presume he will consider himself responsible for the accuracy of his abstract.

Under the second general head Dr. D. warns his young hearers, that, vain and deceitful as this philosophy is, they are still in danger of becoming a prey to it. He represents this danger to arise from the plausible, but fallacious arguments of ingenious and learned infidels; from the imposing confidence



with which they assert their doctrines and advance their arguments; from the arts which are used to induce a belief, that this false philosophy is embraced by the great body of mankind, especially by those who are most distinguished for their genius and attainments in science; from the actual bias of a depraved world towards infidelity; and from the corruptions of the hearts of his hearers themselves, being enlisted on the side of this impious philosophy.

Dr. D. then proceeds to the third and last principal division of his subject, in which he dissuades his hearers from yielding themselves a prey to this philosophy, by representing its unsettled, contradictory, and continually changing character; by shewing its inefficacy to restrain vice and promote virtue, and its tendency to produce opposite effects; by adverting to the consideration, that it has never been able to support itself, nor to make any serious impression on the evidence of the divine origin of the scriptures; and, finally, by assuring them, that philosophy will *not*, and christianity *will*, increase their comfort, and lessen their distresses in this world, and save from misery, and confer happiness hereafter.

In every part of these discussions Dr. D. discovers learning, ability, and a serious concern for the welfare of those whom he addresses. Were we to make a remark on the composition in general, it would be, that he is sometimes too diffuse, and sometimes falls into unnecessary repetition. We consider the performance, however, as uncommonly respectable. The method of treating the subject pursued by the writer, is natural and judicious. The style is perspicuous, glowing and forcible, notwithstanding occasional redundancies, and generally correct. A severe verbal critic might, indeed, frequently find room

for animadversion; but this is of small moment in a work in which style appears to have been a subordinate object with the writer. We lament that the limits to which we are confined, do not admit of laying a specimen of his reasoning and his manner before our readers.

#### ART. XXI.

*An ORATION, pronounced on the 4th of July, 1799, at the request of the Citizens of New-Haven. By David Daggett. Second Edition. pp. 28. 8vo. New-Haven. Thomas Green and Son. 1799.*

THIS singular and amusing piece of oratory commences with a quotation from Swift's description of the Grand Academy at LAGADO, in LAPUTA, by which that ingenious and witty writer has ridiculed the pretended discoveries, and useless projects of philosophers and artists, and censured the abuses of learning and science. Supposing the philosophers of the present day, not less fertile in extravagant schemes than the learned academicians of Laputa, Mr. D. points the shafts of ridicule at those, who have laboured to construct *self-moving machines*; to ascend the air in balloons, or dive to the bottom of the ocean. He observes, that agriculture has not escaped the rage for *theoretic* improvement, and the labours of the *speculative* husbandman are suspended, and his utensils neglected, in the hope of a harvest without toil. The contagion of *theory* has also extended to *medicine, education, morals and politics*: Hippocrates, Galen and Sydenham, have given place to *Brown and Perkins*. Superficial and fantastic modes of education have undermined the good old maxims of our forefathers; and new theories of morals and polity have generated

a brood of *cosmopolites*, destitute of social affections, without the love of their country, the apologists of crimes, and the propagators of licentiousness and anarchy. These innovators and projectors, and their followers, are successively subjected to the rhetorical scourge of Mr. D. who has inflicted the stings of *irony* and *sarcasm* with merciless severity. He remarks, however, that notwithstanding those sublime inventions and wonderful discoveries, the great mass of his countrymen are *stupid* enough to keep their horses and oxen, and to prefer being impelled on the surface of the sea by wind and tide, to moving among clouds or monsters of the deep, by the force of *gas* or the expansion of steam.

To the inquiry where these novel theories have appeared, Mr. D. answers:—"They have dawned upon New-England; they have glowed in the Southern States; they have burnt in France. We have seen projectors in boats, balloons and automats. A few philosophical farmers—a few attempts to propagate naked sheep—and we have at least one philosopher in the United States, who has taken an accurate mensuration of the mammoth's bones,—made surprising discoveries in the doctrine of vibrating pendulums, and astonished the world with the precise guage and dimensions of all the aboriginals in America."

An inquisitive reader might here ask, whether the discovery of the means of forming a more correct and practicable standard of measure than has hitherto existed, is a fit subject of ridicule, to a grave and enlightened audience; or whether such researches into the natural history of our country, as a distinguished and admired historian of America thought worthy of his laborious attention, merit to be confounded with every thing that is useless, ab-

surd, and hostile to the welfare and safety of human society?

Our medical readers will be disposed to think that there is neither wit, nor justice in the attempt to place *Brown* and *Perkins*, in the same class of vain pretenders to extraordinary skill. Indeed, we cannot but remark, that in this part of Mr. D.'s performance, there is too little discrimination or liberal discernment;—too much of that general, comprehensive and unqualified censure, which distinguishes the uninformed, uncandid, and less cultivated portion of society. Some distinction may be made between *new theories* of *morals*, *policy* and *legislation*, which essentially and immediately affect the happiness and tranquillity of mankind, and those theories, however extravagant, new, or speculative, in *physics*, which are in general harmless, or injurious to the interest of the individuals only, by whom they are adopted and pursued.

We do not very well know how any great improvement has been, or ever can be made in any art or science, without *theory*, and a spirit of discovery and *innovation*.—There appears little danger that men will suddenly abandon their habits of life, to adopt the schemes of any projector, however plausible.—The history of science evinces the tardiness and languor of human belief concerning things which contradict pre-conceived opinions, or surpass vulgar apprehension. Much time, patience, and perseverance, were necessary to convince mankind of the truth of many things in the science and economy of nature, which are now so familiar, that we wonder at the stupidity and folly of our ancestors in withholding their assent to such discoveries, or persecuting their authors. "It is believed that Socrates, and Plato, and Seneca; Bacon, Newton and Locke,



who lived and died before the commencement of the French revolution," were very audacious *theorists* and *innovators*. But can it be admitted, if such men existed at this day, and should embrace systems of policy different from our own, or those we regard as honest and sound, that, therefore, their science and philosophy were vain pretensions, and fatal delusions.

From his own country Mr. D. directs his views to France, the dangerous and fatal tendency of whose political principles, he depicts with much warmth and animation; and whose conduct towards America, and other nations, he describes in the strong language of just abhorrence, and honest indignation.

To some of the apologists of that nation, he thus addresses himself:

"But 'tis said, these mighty events, which now astonish the world, are in exact conformity to the will of heaven. What do the asserters of this proposition mean? That 'tis, in itself, right, and therefore, agreeable to the will of heaven, for one nation to destroy the government of another, be that government ever so bad?—If they mean this, I answer directly, the proposition is false. All writers, on the laws of nations, without an exception, teach a directly opposite doctrine. Nay, this principle would place France above reproach. It would give her the ground she has assumed, viz. That power is the only rule of action. This is her creed. This her friends, (I have, once and again heard them) declare to be her standard. And what is this but a principle which has ever been the single rule of conduct in hell!—

"But 'tis said, these events tend directly, to fulfil a great plan, for the good of the universe. Do these apologists, for Frenchmen, mean that the Directory, and their subordinates, are commissioned by God, to destroy all the governments on earth? If they mean this, I beg them to shew, first, that they are the privy counsellors of Heaven; and, secondly, that such commissions have actually issued. But do they mean that these horrid acts of plunder, treachery and

murder, are under the divine controul, and, therefore, we must acquiesce and rejoice? If they mean this, I congratulate them on their resignation, and wish that it may increase till it produces a spirit of reconciliation to our own government. But is it a just principle, that we are to be thankful, for all events, because they are under the divine controul? I think the friends of this new theory should praise God for all the evil and misery which men commit, and suffer, and they will be entitled, then, to the credit of being consistent.

"But is it meant that these events *will* produce good, and therefore are the subject of rejoicing? Thunder and lightning, volcanoes and earthquakes, pestilence and famine, which *affrighten, astonish and destroy*, may produce good! The fire and plague of 1665 and 1666, which desolated the first city in the world, probably, have been followed with salutary consequences! But what assembly ever yet seriously engaged in mutual congratulation, that the pestilence was slaying its thousands, or that millions of old and young, innocent and guilty, were consumed by a conflagration, or swallowed up by an earthquake?

"Nay, there was a murder, once committed, on Mount Calvary, which has produced all the good in the universe. Who has yet been found, to applaud these murderers?—Mark the difference, in the conduct of heaven, at the birth and death of the Saviour. At the one, "all the sons of God shouted for joy." At the other, in direct disapprobation thereof, the Heavens were veiled in darkness, and the earth shook to its centre!"

The conduct of their ancestors, and its effects, are thus presented to the view of his audience:

"I have made these observations, my fellow-citizens, that we may, on this anniversary of our national *existence*; a day which I hope may be kept sacred to that solemn employment, contemplate the labours, the exertions, and the characters of those venerable men who founded, and have, hitherto, protected this nation. I wish them to be seen, and compared with the speculating theorists, and mushroom politicians of this age of reason.

"It is now less than two hundred years since the first settlement of white people was effected in these United States; less than one hundred and eighty since the first settlement was made in New-Eng-

land, and less than one hundred and seventy since the first settlement was made in Connecticut. The place where we are now assembled was then a wild waste.—Instead of cultivated fields, *dens and caves*.—Instead of a flourishing city, *buts and wigwags*.—Instead of polite, benevolent, and learned citizens, *a horde of savages*.—Instead of a seat of science, full of young men, qualifying [*themselves*] to adorn and bless their country, here was only taught the art of tormenting ingeniously; and here were only heard the groans of the dying.

“What is here said of New-Haven, may, with little variation, be said of all New-England, and of many other parts of the United States.

“We have now upwards of four millions of inhabitants, cultivating a fertile country, and engaged in a commerce, with 876,000 tons of shipping, and second only to that of Great Britain.

“How has this mighty change been effected?—Was it by magic? by supernatural aid? or was it by ingenious theories in morals, economics and government? My fellow-citizens, it was accomplished by the industry, the labour, the perseverance, the sufferings, and virtues of those men from whom we glory in being descended.\*

“These venerable men spent no time in extracting sun-beams from cucumbers—in writing letters to Mazzei, or perplexing the world with the jargon of the perfectability of human nature.

“They and their illustrious descendants pursued directly, and by those means which always will succeed, for they always have succeeded, those which common sense dictate, the erection and support of good government and good morals. To effect these great objects, they stood like monuments, with their wives, their children, and their lives in their hands.—They fought—they bled—they died.—At this expense of ease, happiness and life, they made establishments for posterity—they protected them against savages—they cemented them with their blood—they delivered them to us as a sacred deposit, and if we suffer them to be destroyed by the tinsel refinements of this age, we shall deserve the reproaches, with which, impartial justice will cover such a pusillanimous race.”

The style of this oration is, in

general, clear, animated and flowing. In some parts, the strain may be regarded as unsuitable to the gravity of the occasion, and the importance of the subject; but those who are pre-disposed to laughter, will not nicely investigate its propriety.

This oration having passed through a *second* edition, we presume that it has secured so much of the public approbation, as will shield it from the attacks of minuter criticism.—We are not in the number of those, who expect “to make pincushions out of marble,” nor shall we attempt “to cut blocks with a razor.”

#### ART. XXII.

*An ADDRESS, delivered before the Massachusetts Charitable Fire Society, at their annual Meeting in Boston, May 31, 1799. By John Davis, Esq. Boston. J. Russell. pp. 24. 8vo.*

THIS is a very light, superficial and incorrect performance.—It is destitute of that unity and method which are essential to every composition, however brief and unimportant; and the language is, for the most part, crude, affected and obscure.

Though we regard with equal abhorrence as Mr. D. the abuses of human reason which have assumed the name of philosophy, and feel equal indignation, at the unjust, selfish, and pernicious conduct of the rulers in France, yet we do not see the propriety of introducing topics of this kind, on the present occasion; and particularly to occupy so considerable a portion of a brief performance, with matter, which the speaker himself considers as a digression from the *proper* subject of his discourse.

\* See Trumbull's History of Connecticut—a book which ought to be in every family.



The remainder of this short speech, contains some scanty information of the means devised, and employed in some parts of Europe, for the prevention of *accidental fires*, and which must be familiar to our readers.

### ART. XXIII.

*An ORATION, pronounced July 4th, 1799, at the request of the Inhabitants of the Town of Boston, in Commemoration of the Anniversary of American Independence. By John Lowell, Junior. Boston. Manning and Loring. pp. 27. 8vo.*

**B**Y an institution of the town of Boston, the orator of the 4th July is required to consider "the feelings, manners, and principles," which led to the declaration and establishment of our national Independence.—That the transaction or event, which a person is selected to elucidate and embellish by his eloquence, should be the main subject of his performance, seems an obvious and essential requisite in its composition. Each successive orator, necessarily finds the ground, in some degree, pre-occupied, and the prescribed path, more and more beaten by those who have preceded. He is compelled to take a wider range in search of novelty, by which to interest the feelings, and enchain the attention of his audience; or, adhering to the more appropriate, but already exhausted topics of argument and illustration, be contented to merit or incur the imputation of indolence or dulness, by trite argumentation and stale remark, by repeated congratulation, and the reiterations of self-applause.

But the difficulty of invention, and the labour of investigation, as well as the hazard of repetition and indifference, have been, of late, di-

minished, and the orator is in danger of being dazzled by the splendour and magnificence, or overpowered by the sublimity and horror of the scene before him.

The French revolution and its causes, relations and consequences, its real and probable influence on the happiness of mankind, and particularly on our own people and government, have furnished very ample and various materials for argument, conjecture and declamation, on which all the powers of eloquence and imagination may be exercised, all the figures and graces of rhetoric employed, without fear of weariness, or danger of satiety.

The original connection between America and France, in the struggle of the former for independence, their subsequent intercourse and occasional dissensions, are topics for popular instruction and entertainment, which appear related to the principal subject of a discourse on the anniversary of our national sovereignty, and naturally lead to more distant and extended views of the French revolution.

To vindicate our revolution from the misrepresentations and calumnies of those who have endeavoured, by its example, to justify that of France, the author of the performance now under consideration, has, with much warmth of colouring and fervor of imagination, exhibited a comparison between the spirit and character of both. The two pictures present a perfect contrast. In that of America, we behold a people distinguished for "unsullied virtue, uncorrupted simplicity, and a pure and undefiled religion," impelled by an "ardent love of liberty, an unconquerable spirit of independence, a hatred of foreign dominion, and detestation of domestic oppression," calmly and dispassionately resolve "to resist the earliest incroachments of arbitrary power;" and, pursuing with moderation and

firmness, that one legitimate object, preserving inviolate moral and religious institutions, the principles of justice, the order of civil society, and the rights of persons; and when their lofty purpose was accomplished, return to the enjoyment of innocence and repose.

In the picture of France, every thing is the reverse of the former; and the diffuse and elaborate description of Mr. L. may be comprised in the sublime and forcible language of the poet, in depicting that doleful region,

"Where" *virtue* "dies," *vice* "lives and  
nature breeds,  
Perverse, all monstrous, all prodigious  
things,  
Abominable, inutterable, and worse  
Than fables yet have feigned, or fear  
conceived,  
Gorgons, and hydras, and chimeras dire."

Mr. L. regards the spirit of faction as a base but inseparable ingredient in every free constitution. It is a noxious plant which thrives and propagates most in the genial and luxuriant soil of a popular government. Ambition and cupidity, which find so many objects of pursuit in republics and democracies, generate and maintain the turbulent and discontented race of factious beings, who, while that liberty which cherishes their existence endures, will propagate and live. But their attacks would be impotent, and their efforts fruitless, were they not "supported by foreign gold, and encouraged by external assistance." The "Gallic faction," in our own country, by a community of opinions, and a sympathy of views, have leagued with the irreligious, immoral, and disorganizing sectaries of French philosophy, to destroy the foundations of civil society, subvert our virtuous and venerable institutions, and overwhelm all religion, law, and liberty.

That sentiment of gratitude, so

natural and so powerful, after the termination of our revolution, towards our then ally, has been artfully wrought upon, to lead the people to regard with equal sensibility and approbation, the conduct of the successive ruling parties in France. The absurdity of this claim of gratitude, and its abuse, are, indeed, palpable; but the charm is now dissolved, and we are no longer to apprehend being the dupes of such dangerous hallucinations.

After expatiating on the measures of our "domestic faction," and the dangers which threaten our internal repose, the orator proceeds to point out the more imminent and striking hazards, to which we are momentarily exposed from the open attacks, and secret machinations of the rulers of France, boundless in their ambition, and insatiable in their avarice, "whose support is plunder, whose nutriment is carnage, and whose pastime is human wretchedness." He depicts the conduct of that republic, towards surrounding nations, and demands if from so ferocious a monster "we have reason to expect forbearance, to hope for its friendship, to trust to its moderation, or to confide in its justice." Those who still cherish the love of peace, and preserve their faith in the professions of France, he reproaches for their supineness and credulity, reminds them of the opinion of our chief magistrate, that there can be no peace without degradation and submission, and no security in negotiation and convention. He recalls to their view the "magnanimous and unconquerable spirit of their forefathers;" exhorts them to discard the delusive and dangerous idea of peace, and to be prepared to repel attack, or to treat at the point of the bayonet, and to proclaim our rights from the mouths of our cannon.

The conclusion, though not remarkable for its elegance or felicity,



accords with the taste and feeling of the day.

We have thus given the leading features of this oration; on which we have bestowed more attention than many of our readers may think due to its magnitude or importance. But productions of this nature, form so considerable a portion of the literary harvest of our country, that we may be excused for conferring on them a degree of attention insuitable to their intrinsic worth, and which, amidst a frequency of more valuable and lasting works, would be wholly disproportionate and misplaced.

When beings of a larger growth and more durable existence do not present themselves, the curious and deliberate inquirer may be allowed to regard, with more protracted observation, the qualities of the fleeting insects of a day.

#### ART. XXIV.

*An ORATION, written at the request of the young Men of Boston, and delivered July 17,\* 1799, in Commemoration of the Dissolution of the Treaties and Consular Convention between France and the United States of America. By Thomas Paine. Boston. J. Russell. 1799. 8vo. pp. 30.*

THE origin and nature, the causes and consequences of the political connection between France and America, as well as the circumstances which led to its formal dissolution, merit the deliberate attention of all who, disregarding selfish and temporary considerations, extend their concern to the future and permanent security and felicity

of their country. The subject and occasion of the ORATION, here introduced to the attention of our readers, are very remarkable, and will constitute an important ingredient in the history of the two nations. From the due consideration of them are we to deduce the true principles of policy, which should guide us in our intercourse with foreign nations, and enable us to ascertain the nature and extent of those external relations, which may consist with the genuine interest, the peace, and independence of our country. How far that union, which had its origin with our first existence as a nation, has contributed to introduce a system of political action, that may influence or controul the future destiny of America, we dare not conjecture, much less to decide. In speculations of this kind Mr. P. has not indulged. He has taken no retrospective, or historical survey of his subject, nor drawn any practical conclusion from the facts before him. He has adopted a more facile and popular course; and contented himself with commenting on the character and conduct of the ruling powers in France, which may be supposed to have been the immediate causes of that event, which it was the purpose of the young men of Boston to celebrate, and the province of Mr. P. to illustrate and adorn, by his rhetorical skill.

His topics are those of daily and familiar discussion, and frequent declamation; and his sentiments and comments are not materially different from those, we have had occasion to notice in our remarks on the preceding article of this review.

Mr. P. is an ardent and zealous

\* The Law of the United States, dissolving the Treaties and Consular Convention with France, was approved by the President on the 7th July, 1798. From the vicinity of this day to our national anniversary and other causes, this event was celebrated on the 17th. This *anachronism* is not only venial in itself, but is also sanctioned by undeniable precedent."

friend to the government and institution of his own country, and he honestly avows his undissembled abhorrence of those of France.

His eloquence is of that florid and ambitious kind, most consonant to the feelings and temperament of youth. Such qualities Quintilian was pleased to observe in his pupils, because redundancy is better than deficiency, extravagance than penury of language; and it is easier to repress exuberance than to give increase to sterility, to restrain the impetuous than to stimulate the inert. But vigor and durability cannot be attained, and preserved, without seasonable and judicious cultivation.

The style of Mr. P. abounds with metaphors; some of which are more specious than correct; with allusions more strained than new; and with expressions more studiously introduced than elegant or happy. In the selection of words he is often capricious, and too licentious in their use. Of his numerous epithets some are feeble, and a few unmeaning; and the texture of a sentence is more than once impaired, by an unapt and needless quotation. Some words of recent and Gallic origin occur, which a writer, studious of adhering to the purest and best models, would hesitate to employ. In the use or display of literary opulence, the extent of our excursions may be discovered, but the exhibition may also be motley, and mark a vulgar curiosity, rather than a refined taste and judicious selection.

These remarks may be regarded, by some, as proceeding from too nice an examination, and a too rigorous scrupulosity. Though they have been principally suggested by the perusal of Mr. P.'s performance, yet they may, in general, be applied to the preceding articles, which relate to subjects of the same nature.

*Account of American Editions of Foreign Publications.*

#### ART. XIII.

*Essays, Political, Economical, and Philosophical. By Benjamin Count Rumford. The first American, from the third London Edition.*

(Continued from page 305.)

THE fourth essay in this work is designed to investigate the causes of defects in the present mode of constructing chimnies, and to point out the remedy. The chief of these defects is the insufficient or obstructed conveyance of the smoke; in consequence of which, that which should pass up the chimney escapes into the room, and greatly diminishes the comforts and benefits of fire. For this, the obvious remedy consists in removing those hindrances to the ascent of smoke, whose natural tendency is upward, and which requires nothing but a passage.

These hindrances are various; but, in most cases, the evil is completely removed merely by diminishing the fire-place and throat of the chimney. For this end, a few bricks, and some mortar, will suffice, and the benefit derived will be, not only the freeing our apartments from smoke, so injurious to our eyes and constitution, and to furniture, and walls, and hangings, and pictures, but the saving of fuel, and the promotion of health. One half, or one third of the fuel formerly consumed, will diffuse the same degree of warmth: this warmth will be *equally* diffused, and ventilation may be easily effected by opening, for one or two minutes, a door or window.

The throats of chimnies are made too large, chiefly, to afford a passage to the chimney-sweeper; but there is a mode to be afterwards explained, by which this end may be ac-



complied, consistently with the reduction of the chimney to just dimensions.

Not only the dimensions, but the place and distance from the fuel, of the *throat* or canal of the chimney, ought to be considered. Its place ought to be perpendicularly *over the fire*, and as *near* the fire as the situation of the mantle, or arch of the fire-place, will admit. It may be sometimes necessary to lower this arch, which is cheaply and easily effected by a board or tin plate stretched across, or a row of bricks, sustained by an iron bar.

A knowledge of the modes and operations of heat, may be gained, in some sort, theoretically; and this, alone, would point out the due management of brick, mortar, and fuel, so as to produce the utmost quantity of heat. The knowledge, however, flowing from experiment, is more satisfactory, and the facts contained in this essay, though conformable to, and necessarily flowing from the known laws of heat, are, likewise, the direct results of numerous experiments.

The greatest heat is drawn into the room by bringing the fire as far forward as possible. At present the backs of fire-places are commonly *as wide* as the opening in front, whereas they ought to be *narrower* by one third. The sides are commonly perpendicular to the back, and parallel to each other, whereas they ought to be considerably inclined to it (in an angle of about one hundred and thirty-five degrees) and to present an oblique front towards the opening of the chimney, in consequence of which, the heat, instead of being reflected from one side to the other, is indirectly reflected into the room.

The heat from a fire, being chiefly produced by reflection from the back and sides, and this reflection depending not only on the position and dimensions of these,

but on the materials of which they consist, it is of great moment to discover by what materials the greatest quantity of heat is reflected. That which is not reflected is absorbed. That substance which, by exposure to the fire, becomes soonest and most hot, may be deemed to absorb most, and, consequently, to be least suitable to fire-places.

Iron, and metals in general, as they grow soonest and in the greatest degree hot, by exposure to burning fuel; that is, as they absorb most and reflect least of the heat imparted by the fuel, are the *worst* materials for a fire-place. Common brick, faced with mortar, is found to absorb least and reflect most, and, consequently, is the *best* material. Since white surfaces reflect more than surfaces of any other colour, it is useful to *white-wash* the sides and back as frequently as possible.

The degree in which it is proper to narrow the throat and back of a chimney, and to bring forward the fire, is settled by numerous experiments. In fire-places of the common size, four inches is the proper width. In no case ought it to exceed five. The back should be brought, as nearly as circumstances will admit, to one third of the breadth of the opening in front. The fuel should be perpendicularly under the opening for the smoke; and, for that end, the back should be upright. In the structure of new, and the amendment of old fire-places, let the following dimensions be observed:

Thickness of the chimney wall, in front, . . . 9 inches.  
Width of the canal or throat, . . . . . 4  
Depth of the fire-place, 13  
Width of the back, . . 13  
Obliquity of the sides, 135 degrees.

Passage for the chimney-sweeper may be provided by placing a movable stone in the new back of the

chimney, fitted accurately to the cavity, and capable of being removed and replaced at pleasure.

To confer accuracy upon his statements respecting the causes and cure of smoking chimnies, the author explains, in a diffuse and popular manner, the cause of the ascent of smoke. For this end, he explains the influence of heat, in expanding, making specifically lighter, and, by consequence, raising higher, fluids of all kinds. Some beautiful experiments are described, in which oil is made to rise above water, and *hot* coloured water above colourless and *cold* water.

“Various mechanical contrivances have been imagined for preventing the wind from blowing down chimnies, and many of them have been found to be useful;—there are, however, many of these inventions, which, though they prevent the wind from blowing down the chimney, are so ill-contrived on other accounts as to obstruct the ascent of the smoke, and do more harm than good.

“Of this kind are all those chimney-pots with flat horizontal plates or roofs placed upon supporters just above the opening of the pot;—and most of the caps which turn with the wind are not much better.—One of the most simple contrivances that can be made use of, and which, in most cases, will be found to answer the purpose intended as well or better than more complicated machinery, is to cover the top of the chimney with a hollow truncated pyramid or cone, the diameter of which above, or opening for the passage of the smoke, is not above 10 or 11 inches. This pyramid, or cone, (for either will answer) should be of earthen ware, or of cast iron;—its perpendicular height may be equal to the diameter of its opening above, and the diameter of its opening below equal to three times its height. It should

be placed upon the top of the chimney, and it may be contrived so as to make a handsome finish to the brick-work. Where several flews come out near each other, or in the same stack of chimnies, the form of a pyramid will be better than that of a cone for these covers.

“The intention of this contrivance is, that the winds and eddies which strike against the oblique surface of these covers may be reflected upwards instead of blowing down the chimney. The invention is by no means new, but it has not hitherto been often put in practice. As often as I have seen it tried it has been found to be of use; I cannot say, however, that I was ever obliged to have recourse to it, or to any similar contrivance; and if I forbear to enlarge upon the subject of these inventions, it is because I am persuaded, that when chimnies are properly constructed *in the neighbourhood of the fire-place*, little more will be necessary to be done at the top of the chimney than to leave it open.”

Count Rumford's mode of composition is not less singular and peculiar to himself than the subjects he has chosen. His style is remarkably diffuse, and his sentences intricate and prolix, yet there is no want of perspicuity, and nothing is languid or monotonous. The same fact is stated in company with all its circumstances, and is stated several times. His conclusions are enforced by the most familiar, long drawn, and varied illustrations. In this he thinks himself justified by that useful purpose at which he aims, the instruction of those whose ignorance makes them slow to apprehend, and their prejudice reluctant to admit, new and uncommon truths. Those accustomed to reason and investigate, would be satisfied with greater brevity, but will not be displeased with that copious display and ample elu-



aidation of the subject, which, to minds less active and enlightened, will prove absolutely necessary.

Several plates accompany this essay, in which, the author's improvements, so successfully unfolded in words, are likewise exhibited to the eye. Of these, it is only requisite to say, that they fully answer the end designed by them.

This essay concludes with some curious remarks upon the management of coal fires. As coal is likely to grow, daily, into more extensive use among us, as these remarks are less diffuse than the preceding observations, and will afford a favourable specimen of the composition of the work, we shall give them, with little variation, in his own words.

"I cannot conclude this essay without again recommending, in the strongest manner, a careful attention to the management of fires in open chimnies; for not only the quantity of heat produced in the combustion of fuel depends much on the manner in which the fire is managed, but even of the heat actually generated a very small part only will be saved, or usefully employed, when the fire is made in a careless and slovenly manner.

"In lighting a coal fire more wood should be employed than is commonly used, and fewer coals; and as soon as the fire burns bright, and the coals are well lighted, and *not before*, more coals should be added to increase the fire to its proper size.

"*Kindling balls* composed of equal parts of coal—charcoal—and clay; the two former reduced to a fine powder, well mixed and kneaded together with the clay, moistened with water, and then formed into balls of the size of hens' eggs, and thoroughly dried, might be used with great advantage instead of wood for kindling fires. These *kindling balls* may be made so inflammable as to take fire in an instant and with

the smallest spark, by dipping them in a strong solution of nitre and then drying them again, and they would neither be expensive nor liable to be spoiled by long keeping. Perhaps a quantity of pure charcoal, reduced to a very fine powder, and mixed with the solution of nitre in which they are dipped, would render them still more inflammable.

"I have often wondered that no attempts have been made to improve the fires which are made in the open chimnies of elegant apartments, by preparing the fuel; for nothing surely was ever more dirty and disgusting than a common coal fire.

"*Fire balls* of the size of goose eggs, composed of coal and charcoal in powder, mixed up with a due proportion of wet clay, and well dried, would make a much more cleanly, and, in all respects, a pleasanter fire than can be made with crude coals; and, I believe, would not be more expensive fuel. In Flanders, and in several parts of Germany, and particularly in the Dutchies of Juliers and Berg, where coals are used as fuel, the coals are always prepared before they are used, by pounding them to a powder, and mixing them up with an equal weight of clay, and a sufficient quantity of water to form the whole into a mass, which is kneaded together, and formed into cakes; which cakes are afterwards well dried, and kept in a dry place for use. And it has been found by long experience, that the expense attending this preparation is amply repaid by the improvement of the fuel. The coals, thus mixed with clay, not only burn longer, but give much more heat than when they are burnt in their crude state.

"It will doubtless appear extraordinary to those who have not considered the subject with some attention, that the quantity of heat

produced in the combustion of any given quantity of coals should be increased by mixing the coals with clay, which is certainly an incombustible body;—but the phenomenon may, I think, be explained in a satisfactory manner.

“The heat generated in the combustion of any small particle of coal existing under two distinct forms, namely, in that which is *combined* with the flame and smoke which rise from the fire, and which, if means are not found to stop it, goes off immediately by the chimney, and is lost,—and the *radiant heat* which is sent off from the fire, in all directions, in right lines;—I think it reasonable to conclude, that the particles of clay which are surrounded on all sides by the flame, arrest a part, at least, of the combined heat, and prevent its escape; and this combined heat so arrested, heating the clay red hot, is retained in it, and being changed by this operation to radiant heat, is afterwards emitted, and may be directed and employed to useful purposes.

“In composing *fire balls*, I think it probable that a certain proportion of chaff—of straw cut very fine, or even of saw-dust, might be employed with great advantage. I wish those who have leisure would turn their thoughts to this subject, for I am persuaded that very important improvements would result from a thorough investigation of it.

“The enormous waste of fuel in London may be estimated by the vast dark cloud which continually hangs over that great metropolis, and frequently overshadows the whole country, far and wide; for this dense cloud is certainly composed almost entirely of *unconsumed coal*, which, having stolen wings from the innumerable fires below, has escaped by the chimnies,

and continues to sail about in the air, till, having lost the heat which gave it volatility, it falls in a dry shower of extremely fine black dust to the ground, obscuring the atmosphere in its descent, and frequently changing the brightest day into more than Egyptian darkness.

“I never view from a distance, as I come into town, this black cloud which hangs over London, without wishing to be able to compute the immense number of chaldrons of coals of which it is composed; for could this be ascertained, I am persuaded so striking a fact would awaken the curiosity, and excite the astonishment of all ranks of the inhabitants; and *perhaps* turn their minds to an object of economy to which they have hitherto paid little attention.”

The *fifth essay* is somewhat miscellaneous. Its topics are curious in themselves, but not of such relative importance as to demand an accurate abridgment. Some account is given of the Military Academy at Munich, of the means employed to improve the breed of horses in Bavaria, but which, by reason of the jealousy and obstinacy of the peasants, failed of success; and of a scheme for improving the breed of horned cattle, the issue of which has been eminently favourable. A plan is then explained for destroying a species of usury prevalent at Munich; and, lastly, a project for employing the soldiery, in time of peace, in making and repairing the highways. All these schemes testify the benevolence and genius of the writer, and show us the extensive reformation which the minister of a despotic prince is capable of effecting.

Subjoined, are several tables exhibiting the management and expenses of the institutions for the poor, at Munich and Dublin.



## SELECTIONS.

*Condition of the Female Sex at Constantinople.*

[From Dallaway's Description of Constantinople.]

THE inhabitants of the seraglio exceed six thousand, of which about five hundred are women. Many who are employed there during the day, have their houses and families in the city.

When the sultan comes to the throne, the grandees present him with virgin slaves, who, they hope, may become their patronesses.—From these, principally, six are then chosen, who are styled Kadinns; but the late sultan Abdulhamid added a seventh. The first of them who gives an heir to the empire, becomes the favourite, and has the title of Hasseky-sultan. There are many others in the harem, but they seldom are suffered to infringe the exclusive privilege of producing heirs to the empire, which the kadinns claim; for, with the others, the most infamous means of prevention are forcibly adopted. If the child of the first hasseky-sultan should die, her precedence is lost. The old story of the ladies standing in a row, and the sultan's throwing his handkerchief to his choice, is not true. His preference is always officially communicated by the kislar-aga.

So dependant is opinion upon education and the early habits of life, that the state of female society in the seraglio, is to themselves that

of the most perfect happiness. It was ordained by Mahommed that women should not be treated as intellectual beings, lest they should aspire to equality with men. This system he found already prevalent in the east, and received by his converts, and therefore cannot be charged with having curtailed their liberty and social intercourse.—Throughout Turkey, in every rank of life, the women are literally children of larger growth, as trifling in their amusements, as unbounded in their desires, and as absolutely at the disposal of others, being considered by the men merely as created for the purposes of nature, or sexual luxury. None of our mistakes concerning the opinions of the Turks, is more unjust than that which respects the notion attributed to them, that women have no souls; on the other hand, they are promised, in the Koran, to be restored with all the charms of eternal youth and unblemished virginity, and what, in many instances, may heighten the idea of perfect paradise to themselves, not again to be united with their former earthly husbands, but to be allotted to other true muslimans by the benevolence of the prophet.

The females of the seraglio are chiefly Georgian and Circassian slaves, selected from all that are either privately bought, or exposed to sale in the Avrèt Bazar,\* and, for many reasons, are admitted at an

\* The Avrèt Bazar (woman market) consists of an inclosed court, with a cloister and small apartments surrounding it. It is supplied by female slaves brought from Egypt, Abyssinia, Georgia, and Circassia, who are exposed to public sale every Friday morning. Those from the first mentioned countries are generally purchased for domestic services, which, in a menial capacity, no Turkish woman will condescend to perform; their persons or countenances are rarely beautiful, and their price seldom exceeds forty pounds English. The exquisite beauty of the others is enhanced by every art of dress and oriental accomplishments, and they are usually sold for several thousand piasters. Many are reserved for the seraglio, where, though they

early age. We may readily conclude, that an assemblage of native beauty so exquisite, does not exist in any other place.

The education of these girls is very scrupulously attended to; they are taught to dance with more luxuriance than grace, to sing and to play on the tambourin, a species of guitar; and some of them excel in embroidery. This arrangement is conducted solely by the elder women, though from the taste for European fashions, which sultan Selim openly avows, some Greek women have been lately introduced to teach them the harp and piano-forte, which they had learned for that purpose. Amongst the five hundred already mentioned, the kiskar-gha precisely settles all precedence. Some are disqualified by age from the notice of the sultan, and of those who are considered as wives, there are four; he is restricted to seven, but, as to concubines, there is no legal limitation; and their number depends on the inclination of their sublime master. The superiors spend their time in a series of sedentary amusements. Dress, the most sumptuous that can be imagined, changed frequently in the course of the day; the most magnificent apartments and furniture, visits of ceremony with each other, and the incessant homage of their subordinate companions, fill their minds with a sort of supine happiness, which, indeed, is all that most Turkish women aspire to, or are qualified to experience.

Sometimes, as an indulgence, they are permitted to go to the kiosques near the sea, of which cir-

cumstance the officers of police are informed, that no vessel should approach too near the seraglio point. Every summer the sultan visits his palaces in rotation, for a short time, with his harém; when every pass and avenue, within three or five miles distance, is guarded by fierce Bostandjis,\* lest the approach of any male being should contaminate them.

They depend entirely upon their female slaves for amusements which have any thing like gaiety for their object, and recline on their sofas for hours, whilst dancing, comedy, and buffoonery, as indelicate as our vulgar puppet show, are exhibited before them. Greek and Frank ladies occasionally visit them, whose husbands are connected with the Porte as merchants or interpreters, under pretence of shewing them curiosities from Europe.—From such opportunities all the accurate information concerning the interior palace must be collected, and to such I am, at present, indebted.

The articles of female habiliment are infinite, both as to cost and number; but change of fashion is adopted only for the head attire, which happens with scarcely less frequency than in the courts of Europe. They are imitated by the Greek ladies, whose dress differs little from theirs; but the original Greek dress, rather than of the Turkish harém, is that described by lady M. Wortley Montague. Both the style of beauty, and the idea of improving its effect by ornament, amongst the Ottoman women, have much singularity. Of the few I have seen with an open veil, or

are considered as most fortunate, they are most frequently sacrificed. Intrigues are concealed by the application of poisonous drugs, which often occasion death, and upon detection of pregnancy they are instantly drowned. One shudders to relate how many of these victims are taken out into the sea at the dead of the night, and committed to the deep. Formerly, the Avrèt Bazar was open to Franks, who were supposed to purchase slaves in order to redeem them, but they are now excluded, by order of the present sultan's father.

\* The sultan's body guards.



without one, the faces were remarkable for their symmetry and brilliant complexion, with the nose straight and small, the eyes vivacious, either black or dark blue, having the eye-brows partly from nature, and as much from art, very full and joining over the nose. They have a custom too of drawing a black line with a mixture of powder of antimony and oil, called *Surmeh*, above and under the eye-lashes, in order to give the eye more fire. Of the shape and air little can be said from our idea of loveliness. All the Levantine women, from their mode of sitting on their sofa, stoop extremely, and walk very awkwardly. Warm baths, used without moderation, and unrelieved idleness, spoil, in most instances, by a complete relaxation of the solids, forms that nature intended should rival the elegance of their countenances. The nails, both of the fingers and feet, are always stained of a rose colour. Such is the taste of Asiatics. The discriminative trait of beauty between the Circassian and Greek women, is the more majestic air and stature of the former, while the latter excel upon a smaller scale, no less in brilliancy of complexion, than in symmetry and delicacy of form. The statues of Juno, Minerva, or the Amazons, are contrasted by that of the Medicean Venus. Both very generally answer to Homer's description of 'the full eyed,' and 'the deep bosomed.'

In the streets of Constantinople no female appears without her *feredjè* and *mahramàh*; the former resembles a loose riding coat with a large square cape, covered with quilted silk, and hanging down low behind, made universally amongst the Turks of green cloth, and amongst the Greeks and Armenians of brown, or some grave colour. The *mahramàh* is formed by two pieces of muslin, one of which is tied under

the chin, enveloping the head, and the other across the mouth and half the nose, admitting space enough for sight. Yellow boots are drawn over the feet; and thus equipped a woman may meet the public eye without scandal. This dress is of very ancient invention, calculated for concealment of the person, nor can there be a more complete disguise.

In every civilized country, the middle ranks in society enjoy the truest comfort. Whilst the ladies of the harems of great or opulent Turks are consoling themselves with fastidious indulgence, in luxury unknown to the vulgar, the wives and concubines of sober citizens are allowed almost a free intercourse with each other. The men, merchants or mechanics, are engaged in their various occupations, leaving the whole day at the disposal of the women, who walk the streets and bazars in groupes of muffled figures, or go to the cemeteries, where, upon stated days, under pretence of saying prayers at the graves of deceased friends, they enjoy the shade of cypresses, whilst loitering away many hours; and show unrestrained happiness, by the most vehement loquacity. Several times a year they are drawn in arabàhs, or painted waggons with a covering of red cloth, by buffaloes gaudily harnessed, to some favourite retreat in the country, but never attended by the men of their family.

That love of splendid dress which distinguishes the nations of the east, pervades every rank of females. Those connected with the meanest labourer, occasionally wear brocade, rich furs, and embroidery of gold or silver, which are willingly supplied by his daily toil. In large harems, the number of children is proportionably small, where few women produce more than three. Much has been said concerning the infidelity of the Turk-

ish women belonging to harèms of quality. Whoever has passed a few years in this country, must know that any scheme of gallantry would be utterly impracticable, however they may have been prompted, by personal vanity, to impose a false opinion on the world. In complete establishments they are guarded by those unfortunate men

'Who youth ne'er loved, and beauty  
ne'er enjoyed;'

and in those of less expense, by old women, whose ceaseless vigilance is equally secure.

If such things ever happen, it may be supposed of those who are permitted to gad abroad; but this privilege is conditional, and never without a certain number of relatives or neighbours.

During my residence at Pera I heard of but one circumstance only. A young Venetian served in the shop of an apothecary at Constantinople, whom a Turkish lady, attended only by her slave, came to consult, and was shewn into another room, leaving the apprentice and the fair Circassian alone. It is said that nothing then passed between them. In a few days returning with her mistress, and the same opportunity recurring, she opened her heart, proposed elopement, and promised much treasure. She kept her word, and they disappeared without subsequent detection.— Upon discovery, the punishment of these lovers would have been horrible; he would have been impaled alive, and she drowned in a sack. Such a penal code as that of the Turks has, in no period of corruption, been adopted by any nation of Christians.

Infidelity or licentiousness in women is a subject of the severest crimination amongst the Turks, and their punishment of it borders upon gross barbarity. That branch of police is under the jurisdiction of the *Bostandji Bashi*, or captain

of the guard, with many inferior officers. When any of these miserable girls are apprehended, for the first time they are put to hard labour, and strictly confined; but for the second they are re-committed, and many at a time tied up in sacks, and taken in a boat to the *Seraglio-point*, where they are thrown into the tide. The Turks excuse this cruelty by pleading the law, and adding that every woman has it in her power to be attached to one man, by *kebin*, or contract for a certain term before the *kady*, which ceremony would exempt them from the cognizance of the police.

The real state of female slaves in Turkey has been much misrepresented. I do not allude to it previously to their establishment in some harèm, when exposed to sale with practices of their owners equally repugnant to humanity and decency: but when they become private property, they are well clothed, and treated with kindness by their mistresses. If the husband presents his wife with a female slave, she becomes her sole property, and he cannot cohabit with her without legal complaint of the wife, excepting with her consent, which prudence generally inclines her to give. No woman of Turkish birth can be an *odalik*, or domestic slave. Illegitimacy is unknown, for every child, born of the wife or concubine, has nearly equal rights. The superior privilege of the wife consists only in the partition of the husband's property on his decease, and the difficulty of procuring a divorce without her acquiescence. *Odaliks* are dismissed and resold at pleasure, if they have borne no child. But it frequently happens that they become confidential with their mistresses, are emancipated, and married to husbands whom they provide for them. Few young men have more than one wife, but the elder, if opulent, indulge them-



selves to the extent of the prophet's licence. My fair countrywomen, from so slight a sketch of female economy in this eccentric nation, may form favourable conclusions respecting that of our own. They may rest assured, that in no other country are the moral duties and rational liberty so justly appreciated, or so generally rewarded with happiness.

*Sketch of the Manners of Modern Rome.*

[From Stolberg's Travels.]

TO-day and yesterday I have been in company with modern Romans. This morning I was presented to the pope. This old man, who exercises his office with so much solemn dignity, is exceedingly pleasant and familiar, in personal intercourse. I found him sitting at his writing desk: he desired me to sit by him, and conversed with me, with animation and intelligence, on different subjects.

Pius the sixth occupies himself in the cabinet, gets up in winter before day-light, and performs the weighty duties of the papal chair, with a knowledge of present circumstances, and with a firm mind.

The disputes between himself and the king of Naples have been adjusted by him with great prudence; he having preserved, instead of renouncing the least of his rights. He has conducted himself in the affairs of France with equal wisdom and dignity; and has escaped all the snares that have been laid for him, openly and in secret, by the national assembly, which might have led him to take steps that would have given an appearance of justice to their rapacious views.

The secretary of state, cardinal Zelada, is, properly, the prime

minister. He is a man of much understanding and uncommon assiduity. He rises, at this season of the year, at four in the morning; and he seldom leaves the walls of the vatican.

Cardinal Borgia is a man of great ardour, intelligence, and knowledge. He loves the learned; and is glad to see them assemble round him at his table.

A translation of the poem of the Argonauts, by Apollonius Rhodius, is now preparing, by cardinal Frangini. His knowledge of the modern Greek, which he speaks with facility, was serviceable to him, by rendering the ancient Greek more familiar.

The senitor, prince Rezonico, and a count of the same family, understand and love German literature. I have made an acquaintance with the Marchese Rangone, formerly the first minister of the duke of Modena. He likewise reads the German authors with delight; and, to a noble character, adds extensive learning and real genius.

You perceive that interesting men are still to be found among the great. I grant indeed they are *rari nantes in gurgite vasto*. Most of the *Principi*, *Marchesi*, and titled nobility, here, are ignorant; and have that arrogance which sleeps in barren ignorance, like earth unbroken by the plough. But are there no such men among us?

The education of the daughters of the nobility is wretched; hence, domestic happiness is rare. Domestic happiness is a source of tranquillity, of joy, and a preservative against vice; and I think it probable that this kind of happiness is better understood in Germany than in any other country on earth.

From the bad education of the women, domestic virtues, and with them the domestic happiness of the higher ranks, are injured; and the poison of their vices sheds itself

among their inferiors, whose passions, without this concomitant, are violent to excess. The people of Rome are rather led astray and bewildered than, as some would persuade us, addicted to vice by nature. Where the climate inflames the passions, which are neither restrained by education nor curbed by law, they must rise higher, and burn with greater excess, than in other countries. It is dreadful to hear that in Rome, the population of which is estimated at a hundred and sixty eight thousand persons, there are annually about five hundred people murdered. I do not believe, that in all Germany, fifty men perish by murder, within the same period. But could this have been said of the middle ages? And yet our nation has always maintained the best reputation among nations.

The people of Rome cannot be justly accused of robbery. A stranger is no where safer, but is more frequently plundered in most of the great cities of Europe. The Roman stabs his enemy, but does not rob. Anger is his stimulus; and this anger frequently lingers for months, and sometimes for years, till it finds an opportunity of revenge. This passion, which is inconceivable to those who do not feel it, this most hateful of all the passions, the ancients frequently supposed to be a virtue; and it still rages among many of the nations of the south. The passions of the people of Rome are frequently roused by playing at *mora*; though the law has severely prohibited this game; and, if they are disappointed at the moment, of their revenge, they wait for a future occasion. Jealousy is another frequent cause of murder: it being with them an imaginary duty to revenge the seduction of their wife, their daughter, or their sister, on the seducer. The catholic religion, ill under-

stood, encourages the practice: the people being persuaded that, by the performance of trifling ceremonies, and the inflicting of penance, they can wash away the guilt of blood.

All the assiduity of the present pope is not sufficient to reform the police; the faults of which originate in the constitution of Rome. Many churches afford a sanctuary to the pursued culprit. Foreign ambassadors, likewise, yield protection; which extends not only to their palaces, but to whole quarters of the city; into which, the officers of justice dare not pursue offenders. The ambassadors, it is true, are obliged to maintain a guard; but who is ignorant of the mischief arising from complicated jurisdiction? Many cardinals seek to derive honour by affording protection to pursued criminals. Could we find all these abuses collected in any other great city, many men would be murdered, though not so many as in Rome; but robbery would be dreadfully increased, which here is unknown.

Were I to live in a foreign country, and condemned to spend my life in a great city, it is probable there is no place I should prefer to Rome. In no place is the fashionable world so free from restraint. You may daily be present at the *conversazioni*, and go from one to another. Numerous societies, in spacious apartments, are continually to be found; and the visitor is always received with the most prepossessing politeness. The intercourse of society is no where so free as here: you may neglect your visits for weeks or months, and, undisturbed, indulge your own humour. You may return again, after an absence of weeks or months, without being once questioned concerning the manner in which you have disposed of your time.

Do not, from this, accuse the Roman nobility more than any other



people of fashion, of a want of personal affection: the apathy of the great world is every where the same. The absence or the death of any man, is, in no country, felt in fashionable society: but every where, except in Italy, it arrogates to itself an insupportable tyranny over each of its associates.

In the great cities of Germany, we talk of being social; but what can be more unsocial than a company of men who sit down to a silent card party? The animation of the Italians, obviates the degrading necessity of such parties. In company, they play very little; but they converse with fire: and, notwithstanding their rapidity, many Italians express themselves excellently.

A sense of the ancient grandeur of Rome is not yet quite lost to the people. When the queen of Naples was last here, and at the theatre, she was received with great applause; self-forgiveness induced her to make signs to the people to cease their loud clapping, and their shouts of welcome. The people took this very ill; and, the next day, a person of my acquaintance heard one orange woman say to another, "Did you hear how the foreign queen despised our people last night? She must surely have forgotten that many queens before now have been brought in chains to Rome."

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*A FERMENT for Bread used at Debretzin.*

[From Townson's Travels in Hungary.]

**L**IGHTER, whiter, and better flavoured bread than that made here I never ate; nor did I ever see elsewhere, such large loaves. Were I not afraid of being accused of taking advantage of the privilege of travellers, I should say they were near half a yard cubed. As this

bread is made without yeast, about which such a hue and cry is often raised, and with a substitute which is a dry mass, that may be easily transported and kept half a year or more, I think it may be of use to my country for me to detail the Debretzin art of making bread. The ferment is thus made: two good handfulls of hops are boiled in four quarts of water, this is poured upon as much wheaten bran as can be well moistened by it, to this are added four or five pounds of leaven; when this is only warm, the mass is well worked together to mix the different parts. This mass is then put in a warm place for twenty-four hours, and after that it is divided into small pieces about the size of a hen's egg, or a small orange, which are dried by being placed upon a board and exposed to a dry air, but not to the sun: when dry, they are laid by for use, and may be kept half a year. This is the ferment, and it is to be used in the following manner: for a baking of six large loaves, six good handfulls of those balls are taken and dissolved in seven or eight quarts of warm water. This is poured through a sieve into one end of the bread-trough, and three quarts more of warm water are poured through the sieve after it, and what remains in the sieve is well pressed out: this liquor is mixed up with so much flour as to form a mass of the size of a large loaf, this is strewed over with flower, the sieve with its contents is put upon it, and then the whole is covered up warm, and left till it has risen enough, and its surface has begun to crack: this forms the leaven. Then fifteen quarts of warm water, in which six handfulls of salt have been dissolved, are poured through the sieve upon it, and the necessary quantity of flour is added, and mixed and kneaded with the leaven; this is covered up warm, and left for

about an hour. It is then formed into loaves, which are kept in a warm room half an hour; and after that they are put in the oven, where they remain two or three hours, according to the size. The great advantage of this ferment is, that it may be made in great quantities at a time, and kept for use. Might it not, on this account, be useful on board of ships, and likewise for armies when in the field?

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*Sketches of distinguished Characters.*

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Dr. DWIGHT.

**T**IMOTHY DWIGHT was born in the town of Northampton, State of Massachusetts, on the Connecticut River, in May, 1752. His father was a very respectable citizen of the State, and held several civil and military offices under the crown. The event which separated the United States from Great-Britain rendering him suspected, though without reason, he retired to the territory at the Natches, of which he was one of the original purchasers, and died there some time in the year 1777. Mrs. Dwight, the mother of Dr. Dwight, was daughter of the celebrated President Edwards, the Locke of America, and is still living.

Dr. Dwight received the usual school and academic instruction then afforded to youth in the United States; and, at the age of thirteen or fourteen, was admitted into Yale College, at New-Haven, in Connecticut. The term of residence in this institution, previous to graduation, is four years. Here Mr. Dwight very much distinguished himself, particularly in the two last years of his studentship; so that, soon after his taking the degree of bachelor, and at the early age of seventeen or eighteen, he was elected a tutor. In this situation he continued, with great ap-

plause and with great benefit to the college, nearly seven years. He quitted the office of tutor, on the occasion of his marriage, in the year 1777-8, and at the age of twenty-five.

The administration of Yale College was at no time more respectable than during the tutorship of Mr. Dwight. Most of the tutors, at that period, were men of uncommon merit; and of these the most distinguished was Mr. Trumbull, the author of "*M'Fingal*." In connection with this gentleman, Mr. Dwight wrote several occasional and periodical papers, in verse and prose, with uncommon success at the time, but which have since been forgotten in the attention that has been attracted by their subsequent publications. It was while tutor, and in his 19th year, that Mr. Dwight commenced his poem intituled, "*The Conquest of Canaan*;" which was finished, and a subscription for printing it put in circulation, if I do not mistake, in 1775. But the turbulence of the times, and the difficulties which the unsettled state of the country opposed to the distribution of any work—for the present ready intercommunication did not then exist—induced him, notwithstanding the unexampled patronage of a subscription for 3000 copies, to postpone the publication to a period more favourable to the pursuits of literature.

At leaving the College, Mr. Dwight had destined himself to the bar: but the solicitations of a military friend prevailed on him to suspend his devotion to the necessary studies for a time, and to enter the army as a chaplain to one of the Connecticut brigades. In this situation he remained about three years; and the spirit of the American soldiery is supposed to have been not a little encouraged and supported by the numerous songs and



occasional addresses which were composed and circulated through the army by the joint care of Mr. Dwight, Col. Humphreys, and Mr. Joel Barlow.

On quitting the army, Mr. Dwight resumed the business of instructor, and opened an academy at Northampton; in which he continued with singular reputation, till 1783. In this period, he retouched his "*Conquest of Canaan*," and gave it its present form; and on two occasions discharged the duties of a representative of the town, in the legislative assembly of Massachusetts. In the legislature he was very conspicuous; and was strongly solicited to engage in public life, and consent to be elected one of the delegates to the Congress, under the confederation. But a disgust which he had taken to the profession of law, and, perhaps, to legal studies—which are usually connected with political pursuits in the United States—determined him to adhere to the pulpit, to which he felt a growing inclination; and he now sedulously devoted himself to theological studies.

Perhaps the United States have produced no man endowed with talents so peculiarly adapted for the pulpit as Mr. Dwight. To the natural advantages of a person and countenance at once engaging and majestic, a voice full, melodious, and discriminating, and an unusual share of manly sensibility, he added the acquired excellencies of learning various and profound, of spacious and minute observation on all the ordinary affairs, and extensive and particular reflection on all the duties of men; and an eloquence acute, rational, soothing, touching, and commanding at will; and that adapted itself, with equal ease, and without the sacrifice of elegance, to the apprehension of the scholar and the ploughman. As soon as it was known that he

designed to engage in the ministry, he received various offers of settlement: he finally accepted of those from the parish of Greenfield, in Connecticut; whither he removed late in 1783, or early in 1784.

Encumbered with a young and increasing family, and with a salary inadequate to the demand made upon it by his hospitable disposition, Mr. Dwight was obliged to have recourse once again to the business of instruction. He opened an academy at Greenfield; and had soon the satisfaction of seeing it patronized by the most respectable men in the country. Young men resorted thither from the remotest, as well as the nearest, parts of the United States; and this infant seminary, under the auspices of its founder, obtained a quick and firm establishment. Amidst the incessant occupations which now harrassed him, Mr. Dwight, nevertheless, found time to plan and accomplish many literary works, some of which have since appeared. His reputation was now rapidly extending. In 1788, the College at Princeton, New-Jersey, conferred on him the degree of Doctor of Divinity. He continued at Greenfield, to preach and superintend his academy till, on the death of the late venerable Dr. Stiles, he was elected President of Yale College, and removed to New-Haven in the autumn of 1795. This is his present situation; and, under his care, the institution over which he presides, daily acquires consideration, and multiplies its means of improvement for students.

Of the merits of Dr. Dwight as an author, and especially as a poet, different opinions have been, and probably will continue to be formed. It is certainly to be regretted, that his powers have been lavished on a subject which no longer possessing general interest, is not likely to attract general attention, or promote the welfare of mankind, in

any remarkable degree. But the lover of poetry, who shall not be prevented by this from the perusal of "*The Conquest of Canaan*," will discover in it many passages highly poetical; he will probably read the eleventh book with pleasure more than once; and will unite with the celebrated author of "*The Botanic Garden*" in an eulogium on the versification, which, for uniform correctness, has seldom been surpassed.

Dr. Dwight has published—

1. *The Conquest of Canaan*, an epic poem in eleven books. Hartford, 1785. Reprinted in London in 1786, I believe by Johnson.

2. *Greenfield Hill*, a poem in seven parts. Published at New-York in 1794. Republished in London in 1797.

3. Numerous smaller poems, published at various periods; but principally collected in "*American Poems, selected and original*," vol. i. Published at Litchfield, Connecticut, in 1793.

4. A dissertation on the History, Poetry, and Eloquence of the Bible. It was delivered publicly, on the occasion of the author's taking the degree of A. M. and was printed at the time.

5. A Sermon on the Capture of General Burgoyne. This title is not exact. 1777, or 1778.

6. A Sermon, delivered before the Governor and Legislature of Connecticut, at the General Election in May, 1791.

7. A Discourse on the Genuineness and Authenticity of the New Testament. 1794.

8. *The true Means of establishing Public Happiness*. A Sermon delivered on the occasion of the 4th of July, before the Cincinnati, 1795.

9. *The Nature and Danger of Infidel Philosophy*, exhibited in two Discourses, addressed to the Candidates for the Baccalaureate in Yale College. 1798.

10. Several other pieces, in verse and prose, have been ascribed to Dr. Dwight, which have never been collected, and some of which he has never acknowledged.

May, 1798.

H.

LAZARE, *ci-devant* ST. MEARD, and his fellow Prisoners in the *Abbaye*.

FORTUNE appears sometimes to take delight in sporting with the destiny of certain individuals; and in the fate of such, we always become peculiarly interested. The hair-breadth escapes in battle; the romantic but perilous events attendant on shipwreck; the critical preservation from the devouring element of fire; all naturally astonish and delight us: for, in spite of the gloomy reveries of some pretended philosophers, man is naturally good!

But if we are actuated by surprise, if we are fascinated with pleasure, at the deliverance of our fellow men from difficulties that occur daily, how much more shall we be astonished and rejoiced at the escape of an individual, from a massacre of St. Bartholomew, undertaken under the auspices of a sanguinary king, or a still more recent one, during the existence of a bloody and ferocious anarchy?

Journiac Saint Meard, who, since the establishment of the republic, has exchanged this name for that of "citizen Lazare," appertained to the order of nobles, and resided occasionally at the castle of St. Meard. While the peasants were burning the *chateaus* of the neighbouring lords, his tenants placed a may-pole in his court-yard, and danced around it: this circumstance does him infinite honour. The decree for annihilating feudal privileges, bereaved him of half his fortune, and made him at first discontented with the new order of



things; but he was warmly attached to the cause of liberty, and hated on this account by his own class. Like the greater part of that body, he made the profession of arms his study, and attained the rank of captain-commandant *des chasseurs du régiment d'infanterie du roi*. He was present at the *affair of Nancy*, and experienced a series of dangers during that eventful period which more than once had nearly proved fatal to him. The regiments *du Roi*, *Mestre de Camp*, *Châteauneuf*, and several battalions of national guards, nominated him their general, and forced him, against his inclination, to conduct them to Lunéville, in order to take general Malseigne from the Carabeneers. This was a trying occasion, and he had a narrow escape; but it was nothing to what he was destined to experience a few months afterwards.

Being, like most of the military chiefs of that day, an *avowed royalist*, the capture, imprisonment, and decapitation of the king, could not be indifferent to him. He did not, however, attempt to escape, and become an emigrant; on the contrary, he appears to have employed his talents in literary compositions, in favour of his party, and was a constant correspondent to what were then termed the *counter-revolutionary gazettes*.

At length the reign of terror approached, and a few detestable characters having acquired a preponderance in the capital, conceived the horrid plan of deluging it with blood. The municipality, at that time consisting principally of foreigners, took the lead in this scene of horrors, and caused a general sweep to be made of all whom they presumed to consider as *suspected persons*. St. Meard, among a crowd of other unfortunates, was arrested

on the 22d of August, carried to the *Mairie*\* at nine o'clock in the morning, and detained there until eleven at night. His subsequent adventures will come with a better grace from himself than any other person, and they shall be related, as near as possible, word for word. In addition to the interest we are naturally inclined to take in the sufferings of an individual, here will be found a variety of particulars relative to this dark and shocking conspiracy; and it may, perhaps, be permitted to add, that it contains the most minute account hitherto published of this disgraceful period in the French history.

"*J'entends encore leurs cris; leurs lamentables cris.*" *Méropé. Volt.*

"After I had been arrested, two persons, without doubt members of the committee, made me enter an apartment; one of them, overcome with fatigue, fell asleep; the other asked me, if I was M. Jourgniac Saint Meard? I replied in the affirmative, on which he desired me to sit down, adding, "we are all equal—be seated." He then told me, that I was suspected of being the editor of *Le Journal de la Cour et de la Ville*, and that Gautier, whose name had been affixed to it, was a *mere man of straw*. I offered to give him my *word of honour*, that he was mistaken; but he replied, that it was ridiculous to talk now about honour.† He then told me I had been accused of going to the frontiers; I replied that I had not been out of Paris for twenty-three months.

"Are you acquainted with M. Durosoi, editor of the *Gazette de Paris*?"

"Only by reputation—I never saw him in my life."

"This astonishes me, for a letter from you has been found among

\* The residence of the mayor.

† "Eh! Monsieur, il n'est plus question de parole d'honneur."

his papers—it will not, however, prove of any disservice to you—it contains only a copy of the speech you made to the *chasseurs* of your company during the insurrection of Nancy—But are you not a *chevalier de St. Louis*!—“Yes, Sir—”

“Why do not you wear the cross then?”

“Here it is, I have worn it constantly for the last six years.”

“This is sufficient for to-day—I shall go and tell the committee that you are here.”

“Be kind enough to inform the members, at the same time, that if justice be done me, I shall be set at liberty; for I am neither editor nor recruiting officer for the princes, nor conspirator, nor denunciator.”

A few minutes afterwards three soldiers made their appearance, and gave me a signal; in consequence of which, I followed them. When we had reached the court, they invited me to get into a hackney coach along with them; and this being complied with, they ordered the driver to carry us to the *Hôtel du Faubourg Saint Germain*.

No sooner had we arrived at this *hôtel*, which proved to be the *Abbaye*,\* than they presented me, along with a little billet, to the jailer; who, after having hoped, as usual, that my detention would not prove long, caused me to be conducted to a large hall, which served as a chapel to the prisoners under the old government. I counted nineteen unfortunates, extended on coarse beds, made out of hemp; I was accommodated with that of

M. DANGREMONT, whose head had been cut off only two days before! That very afternoon, when we were about to sit down to dinner,

M. CHANTEREINE, colonel of the constitutional troops

of the king's household, stabbed himself three times successively with a knife: after exclaiming,† “we are all destined to be massacred . . . My God, I fly to you!” He died two minutes after.

On the 23d I drew up a memorial, in which I unmasked the turpitude of those who had denounced me; of this I transmitted copies to the minister of justice, to my section, to the committee of inspection, and to all whom I thought likely to feel for the injustice under which I laboured.

At five o'clock in the afternoon, M. DUROSOI,

editor of the *Gazette de Paris*, became one of the companions of our misfortunes. No sooner did he hear my name mentioned than he exclaimed: “Ah! Sir, permit a man whose last hour is approaching, to open his heart to you.” I then embraced him, after which he read a letter which he had just received, and which was to the following purport:

“My friend, prepare for death; you are condemned, and to-morrow - - - - - I should die with grief, were it not that you know what I have promised you. Adieu.”

While this note was reading, I beheld the tears flowing down his cheeks; he then kissed the paper several times, and I could hear him say, in a low tone of voice: “Alas! she will suffer much more than myself!” After this, he lay down on my bed, and we both fell asleep. At break of day he arose, and drew up a memorial, in his justification; it was written with energy, but did not produce any favourable consequence, for his head was cut off the very next day, by the *guillotine*.

On the 25th the commissaries of the jail at length permitted us to

\* A famous prison, formerly the palace of the archbishop of Paris.

† † Nous sommes tous destinés à être massacrés . . . . Mon Dieu, je vais à vous!”



procure a newspaper called *le Journal du Soir*, and a new prisoner, among several others, brought us one, in which I read a very violent paragraph against myself, over-rating my fortune, assigning me an estate appertaining to M. de Segur, and accusing me as editor of an *anti-constitutional gazette*.\*

In the sacristy of the chapel, which served us as a prison, was confined a captain of the Swiss guards, called

REDING,

whose arm had been broken by a musket shot, on the 10th of August; besides this, he had received four sabre wounds on the head. Some citizens saved, and carried him to a ready furnished apartment, whence he was removed to the *Abbaye*, where his arm was set a second time.

On the 26th at midnight, a municipal officer inscribed our names in a register, and gave us hopes that were not realized in the sequel. On the 28th and 29th more carriages arrived with prisoners; we could see them enter from a turret, the windows of which overlooked the street *Sé. Marguerite*. We afterwards paid dearly for this satisfaction.

A person about eighty years of age, was conducted into our apartment on the 30th, and slept along with us. The day after we learned that it was

THE SIEUR CAZOTTE, author of the poems *d'Olivier, Diable amoureux, &c.* The gaiety of the old man, which bordered on folly, diverted us a little from thinking on our misfortunes. He affected to speak in the oriental manner, and endeavoured seriously to persuade us, from the history of Cain and Abel, that we were infi-

nately more happy than those who enjoyed liberty. He appeared very angry that we did not believe him; he wished absolutely to make us think that our situation was nothing more than an *emanation of the apocalypse, &c. &c.* I touched him to the quick, by saying that, in our present position, it would be far better for us to treat in predestination than in any of his reveries. Two *gendarmes*, who came to conduct him before the criminal tribunal, terminated our discussion.

In the mean time I did not lose a single instant in procuring the attestations necessary to verify the assertions contained in my memorial. I was aided, on this occasion, by a friend—and such a friend as is seldom to be met with, who, while my companions in misfortune were abandoned by theirs, was busied, day and night, in rendering me service.

He forgot that during a moment of fermentation and distrust, he might experience the same risks as myself, and that he would become suspected, by interesting himself in behalf of a suspected prisoner. Nothing abated his zeal, and he has admirably proved to me the truth of the old proverb, “that adversity is the touchstone of friendship.” To his fidelity and attachment I am principally indebted for my life; and I owe it to the public, to myself, and to truth, that I should name this brave man: it is

M. TEYSSIER,

Merchant, *Rue Croix des Petits-Champs*.

Sept. 1st. On this day three of our companions were liberated: they were far less astonished at their deliverance than they had been at their imprisonment; for they were

\* “MM. ST. MEARD ET BEAUMARCHAIS, ont été arrêtés: le premier était auteur du journal scandaleux qui paraissait sous le titre de *Journal & de la Cour et de la Ville*. Il a été capitaine au régiment de roi; & ce qu'il y a de remarquable, c'est qu'il est propriétaire de la terre que le fameux MONTAGNE possédait près de Bordeaux. M. ST. MEARD, jouit de plus de 40,000 liv. de rentes.”

the most zealous patriots of their respective sections. Several others were also dismissed from the adjoining apartment: among these was

M. DE JAUCOURT,  
a member of the legislative assembly, who had given in his resignation, as a deputy, some time before.—My own sufferings now commenced.

On Sunday, September 2d, our jailor served up our dinner sooner than usual: his distracted air and haggard eyes made us presage something sinister. At two o'clock he re-entered the apartment, but was deaf to all the questions put to him; and, contrary to his customary proceeding, he took away all our knives, and made the nurse who waited on Reding retire. Half an hour after, the frightful noise made by the people on the outside of the prison was alarmingly augmented by the drums, which *beat the generale*,\* by three signal cannon that were fired, and by the *tocsin*,† that was rung every where. During this period of terror we beheld the carriages, escorted by an innumerable crowd of furious men and women, who cried out, “A la Force! A la Force!”‡ They were conducted to the cloysters of the *Abbaye*, which had been converted into prisons for the priests. A little after, we heard that they had massacred all the bishops, and other ecclesiasticks, who had been *pienned up* in that place.

About four o'clock the piercing cries of a person hacked to pieces, with blows from a sabre, brought us to the window of the turret, and we perceived the body of a man opposite the gate of our prison, extended on the pavement. A short time afterwards another was massacred; . . . . . and many more in succession. It is totally impossible

to express the horror of that profound and melancholy silence which reigned during these terrible executions. It was only interrupted by the cries of those who were sacrificed, and by the strokes of the sabre they received on the head. The moment one fell a murmur was heard, which was succeeded by the shout of *Vive la Nation!*—a thousand times more frightful to us than the horror of silence. During the interval between the massacres we heard them saying, under our windows,—“Not one must escape—they must be all killed, and especially those in the chapel, where there are none but conspirators.” It was of us they were talking! and it is almost unnecessary to affirm, that we often wished to experience the *good fortune* of those who were shut up in the darkest and most loathsome cells of the *Abbaye*.

About five o'clock several voices uttered the name of

M. CAZOTTE,  
and in a moment afterwards we heard a number of persons passing along the grand staircase, the rattling of arms, and the cries of men and women. It was this old man, followed by his daughter, whom they were conducting to death. The moment he had passed the wicket, that courageous young woman precipitated herself on the neck of her father, and the people, affected at the sight of so much filial tenderness, demanded and obtained his pardon.

About seven o'clock we beheld two men enter, whose bloody hands were armed with sabres; they were conducted by a turnkey, with a lighted torch, who pointed out the bed of the unfortunate Reding. *At that dreadful moment I was pressing his hand in mine, and striving to comfort him.* On their approach he ex-

\* The call to arms.

† Alarm bell.

‡ We did not then know, but we afterwards learned, that this was the signal for sending the victims to execution.



claimed, "I have suffered enough; I do not fear death; it will be charitable to let me perish here!"—These words rendered one of the strangers immovable; but the other hoisted him on his shoulders, and carried him into the street, where he was killed . . . . . My eyes are so full of tears that I do not see what I write . . . . . We now surveyed one another, without uttering a single word; we then clasped each other's hands, and embraced—we fixed our eyes on the pavement of our prison, which the moon enlightened through the intervals of the shade formed by the triple bars that guarded our windows . . . . . but, in a short time, the cries of new victims recalled our original agitation, and reminded us of the

last words pronounced by M. Chantreine, while plunging the knife into his heart,—“We are all destined to be massacred!”

At midnight ten men, armed with sabres, and preceded by two turnkeys bearing torches, entered our prison, and commanded each of us to stand at the foot of his own bed. After we had been counted over, they observed, that we must answer for one another, and swore that if a single person escaped, we should be all massacred, *without being heard by M. le President.*

These last words afforded us a gleam of hope; for we did not yet know that we should be allowed to utter a word before we were butchered.

(To be concluded in the next number.)

## Miscellaneous Articles of Literary and Philosophical Intelligence.

### DOMESTIC.

**PROPOSALS** have been lately issued by Mr. W. W. Woodward of Philadelphia, for printing by subscription, the works of the late JOHN WITHERSPOON, D. D. President of the College of New-Jersey, in three volumes 8vo.—This edition will contain not only all the performances of Dr. W. which have been already published, but several important articles never yet submitted to the press.

*A Summary History of New-England, from its first settlement at Plymouth to the acceptance of the Federal Constitution, &c.* by HANNAH ADAMS, has recently been published in Boston, in one large 8vo. volume.—[Some account of this work will be given in the next number of this Magazine.]

The *American Philosophical Society of Philadelphia* have published the fourth volume of their *Transactions* in one large 4to volume.—[See Review.]

A number of literary gentlemen in Connecticut, have lately associated for the purpose of encouraging philosophical researches, and, particularly, for developing the natural history of that State.

The association has assumed the title of “*The Connecticut Academy of Arts and Sciences.*” The general meeting of the Academy, for the election of officers, is to be held, annually, at New-Haven, on the 4th Tuesday of October; and the other meetings are to be on the 4th Tuesdays of December, February, April, June, and August, at New-Haven.

The following are the officers elected for the present year:

Rev. Timothy Dwight, D. D.	<i>President.</i>
His Excel. Gov. Trumbull,	<i>Vice-President.</i>
Hon. John Treadwell,	} <i>Counsellors.</i>
Rev. James Dana, D. D.	
Dr. Eneas Munson,	
Rev. Bela Hubbard,	
Hon. Chauncey Goodrich,	
Simeon Baldwin, Esq.	

*Recording Corresponding Secretary.*

Noah Webster, jun.	} <i>Corresponding Secretaries.</i>
John C. Smith,	
Enoch Perkins,	
Josiah Meigs, <i>Cabinet Keeper &amp; Librarian.</i>	
Isaac Beers, <i>Treasurer.</i>	

At the annual commencement of Columbia College, in the city of New-York, held the 7th day of August, 1799, the degree of Bachelor of Arts was con-

ferred on the several candidates, by whom the following orations were pronounced:—

1. The salutary oration in Latin. By *Philip Myer*, of New-York. *De religione.*
2. On Ambition. By *Abraham Varick*, jun. of New-York.
3. On History. By *James Manley*, of New-York.
4. On Biography. By *Samuel Riker*, of Long-Island.
5. On the Fair Sex. By *Thornton Mackaness*, of New-York.
6. On the Increase of Knowledge in the United States of America. By *Jacob Livingston*, of Columbia County.
7. On Government. By *Alexander Murray*, of Orange County.
8. On the Passions. By *John V. Varick*, of New-York.
9. On Patriotism. By *Stephen Price*, of New-York.
10. On the Study of Nature, a salutary oration in English. By *Arthur Stanbury*, of New-York.
11. On Philanthropy. By *Peter D. Frohight*, of New-Jersey.
12. On Imprisonment for Debt. By *Jacob Schoonmaker*, of New-Jersey.
13. On National Peace. By *John Christlie*, of New-Jersey.
14. On Luxury. By *Peter Van Pelt*, of King's County.
15. On Industry. By *David Wright*, of New-York.
16. On Energy of Character. By *Arthur M. Walter*, of Massachusetts.
17. On the Progress of Science, a valedictory oration. By *James Lynch*, of New-York.

Dr. Adam Seybert, of Philadelphia, has discovered, at Chestnut-Hill, nine miles from that city, crystals of ADAMANTINE SPAR. It is bedded in large masses of granite, or rather forms a part of that rock, together with flesh-coloured feldspath, smoky quartz, greenish mien, striated crystals of black shoerl, and sometimes small garnets. Its external appearance is very similar to the Bombay specimens; but differs from them in being free from pyrites, and being in much more regularly figured. Its colour is light green, and its hardness such as to cut glass very readily. Some pieces have the lustre of glass, while others are not so bright. In other respects the character of it agrees with that given in *Kirwan's Mineralogy*, p. 335, var. i. From having found other crystals of adamantine spar among the fragments of granite

thrown out by the labourers in digging a reservoir for water at Philadelphia, the vigilant discoverer is led to believe it may be found in many parts of the United States. We are happy to understand Dr. Seybert intends to favour the public with a set of correct experiments on the composition of this curious production of nature.

The same gentleman has also discovered some elegant basalt, of a very regular form, in a situation confirming its Neptunian origin. It was found in a bed of gravel with breccia, at the upper end of Flour-Town, thirteen miles from Philadelphia.

Robert R. Livingston, President of the Agricultural Society, and Chancellor of the State of New-York, has discovered a property, in a species of *conferwa*, (we believe *conferwa rivularis*, Lin.), very plentiful in the water of the Hudson, to afford excellent paper. From samples of paper manufactured from this plant, with an admixture of one ninth of coarse rags, it seems well adapted for wrappings, for hangings, and for book-binders' use. As far as can be judged, the cheapness and plenty of the material will render this discovery very important, by lessening the price of an article so variously employed as paper is. It could, doubtless, be bleached as well as other paper, either by the common process employed for rags, or by aid of the oxygenated muriatic acid gas; and we have seen a specimen in which this has been attempted with considerable success. The liberal and patriotic inventor will, we hope, pursue the subject further.

We understand that Messrs. Vondenvelden and Charland, of the province of Lower Canada, have issued proposals for publishing, by subscription, a map, in three sheets, and a topography, in an octavo volume, of Lower-Canada; including, as well the grants made by the French crown, as the townships surveyed and laid out by the British government. In compiling this work, the publishers, besides their own surveys, have availed themselves of the labours of Messrs. Gale and Duberger, for the materials from the south-western boundary of the province down to the counties of Quebec and Dorchester. It is to be expected, that a work which promises such a valuable addition to the topography and history of America, will meet with due encouragement from the public.

A flourishing young bread-fruit tree



was, in August last, presented to Mr. John Wood, of the city of New-York. It was brought from the Island of Jamaica by Captain Stephen Clay. Though the rigour of our winters may prevent the growth of this and some other plants of the South-Sea Islands in the open air, yet they are justly esteemed a valuable acquisition to the collection of green-house plants.

## FOREIGN.

**D**R. DARWIN has sent to the press a new prose work, entitled, "*Phytologia; or, the Philosophy of Agriculture and Gardening*:" and, should the life of this ingenious and venerable poet and philosopher be spared, we are authorized to expect a new poetical work from his pen.

Professor Olivarius, of the University of Kiel, in Holstein, is engaged in the publication of a new periodical work, entitled, *Le Nord Littéraire, Physique, Politique et Moral*, i. e. The literary, physical, and moral state of the North of Europe. A number appears every three months; the first was published in July, 1797—eight numbers, which complete the first and second volumes, have come to our hands. They contain many very interesting and valuable articles; in the perusal of which we have found much entertainment and instruction. The author, though a German, writes French with great ease, correctness, and elegance. In the succeeding numbers of this Magazine, the reader will be presented with some extracts from the work, and a more particular account of its contents.

The first volume, 4to. of the *General Biography*, or lives of the most eminent persons, chiefly composed by Dr. Aikin and the late Dr. Enfield, has been lately published in London.

An interesting work, entitled, "*A Missionary Voyage to the Southern Ocean, in the years 1796, 1797, and 1798, in the ship Duff*," containing details never before published of the natural and civil state of Otaheite, in 4to. has been published by the Missionary Society in London.

Mr. Brown's valuable Travels in the interior of Africa, whose discoveries meet those of Mr. Park, are announced to the public.

Mr. Neuman's translation of Kotzebue's play, entitled *Family Discrets*, or

*Self-Immolation*, has been performed with uncommon applause at the Theatre Royal, Haymarket.

*The Forrefters, or a Picture of Rural Manners*, has been translated by Miss Plumptre, from the German of Iffland.

Dr. Thornton, of London, is publishing, in numbers, one of which appears every three months, *A new Illustration of the Sexual System of Linnaeus*, to be completed in fourteen numbers.

The Travels of the Duke De la Rochefoucault Liancourt, in the United States and Canada, have been received.

An index to Dumford and Eart's Reports, by T. Tomlins, in 8vo.—*Juridical Arguments*, by Francis Hargrave, Esq. and *A New and Complete System of Pleading*, in ten volumes, by John Wentworth, Esq. have been lately published. [*The last is received by H. Caritat.*]

The Rev. ARTHUR HOMER, D. D. and fellow of St. Mary Magdalen College, Oxford, has circulated proposals, for printing by subscription a work, entitled, "*Bibliotheca Universalis Americana*;" or an universal American library: containing a general catalogue of publications, relating to America and the West-Indies, from the first discovery thereof by Columbus, in 1492, to the end of the present century. This work is intended to comprise not only all books and pamphlets relating to America and the West-Indies, particularly those in our own language, which were written during the late war, but all others of any note and celebrity, which have been written by American authors, or have proceeded originally from the American press, upon what subjects soever they may treat. The best maps, charts, &c. will likewise generally be added, together with all the voyages and discoveries in the North and South Seas throughout the whole of the western hemisphere.

The divisions, which at present appear most eligible to the Editor, are—

1. The general History and Description of the Countries included in this plan, containing the general accounts of Voyages, Travels, Adventures, Journals, Campaigns, Sieges, Battles, &c.

2. Geographical Books, and Gazetteers, Atlases, Maps, Charts, &c.

3. Books upon Divinity and Moral Subjects; particularly the Disputes and Persecutions of the Quakers in Pennsylvania and New-England, the History of the United Brethren in America, and all other religious Sects.

4. Law Books, State Papers, Trials, and Political Pamphlets.

5. Books relating to Natural History, Medicine, Chirurgery, &c.

6. Ditto to the Arts and Sciences, Antiquities and Literature in general.

7. Ditto to Trade in general, and Plantation, Agriculture, and the American Fisheries.

8. Ditto to the Affairs of the South Sea Company in particular.

9. Ditto of the Scots Colony at Darien.

10. Ditto of the Hudson Bay Company.

11. Ditto of the celebrated Mississippi Scheme.

12. Ditto of the Slave Trade and African Company trading to the West-Indies.

13. Ditto of Poetry, Music, Novels, and Dramatic Compositions.

14. Addenda, or Appendix, of Miscellaneous Articles not included under the above heads, or accidentally before omitted.

Lastly. All books in the Indian languages, to what class soever they may properly belong, will be thrown together into a separate Appendix, as more particularly appropriate to this publication.

The work shall consist of two volumes, in quarto, of about five hundred pages each. The price to subscribers two guineas in boards, to be paid when the whole is completed.

That able and skilful naturalist, Frederick Humbolt, had lately quitted Paris, to pass over to Algiers, in order to commence his scientific travels in Africa.—The object of the great journey which he had proposed to make, was to pass to Algiers, in the Swedish frigate the *Jaramas*, to study Mount Atlas and the desert called Saarah, to pass over the desert with the caravan which goes from Tripoli to Mecca, and at last to join the French naturalists in Egypt.—Circumstances, however, have prevented this design; the frigate has suffered shipwreck in a port of Norway, and the Dey of Tripoli has prohibited the caravan from setting out.—M. Humbolt, however, has not been deterred by these discouragements, from his project of quit-

ting Europe, and transporting himself, with all his instruments, into the Torrid Zone. He has repaired, therefore, to Spain, from whence he will pass to Mexico, to Peru, to Chili, and to the Philippines. He is on the eve of setting out for the Havannah, from whence he will repair to Vera Cruz. The king of Spain wished to have some discourse with him, and has given him all possible facilities for his voyage, which promises useful and important discoveries for the sciences.

The following letter relative to the late passage of Mercury over the sun, has been addressed by Lalande, the astronomer, to the Editor of one of the Paris Journals. "I waited impatiently to mark the passage of Mercury over the Sun, in his descending node; he had never been observed completely in that position, and it will be thirty-three years from hence ere it can be done again. I had the pleasure to see Mercury enter on the Sun like a small, black, round spot, on the 18th of Floreal, in the morning, at the very minute indicated in my new tables; the ground-work of which I gave in the first memoir, read at the first assembly of the first class of the Institute, on the very day of its establishment. This is so much the more satisfactory, as for the passage of the 4th of May, 1786, there were forty minutes of error in the best tables of Mercury."

Mich. Szekely de Biborcyfalva, inspector of the mines to Count Schanborn, at St. Niklas, near Munkash, in Hungary, has fabricated of the *Aselepias Vincetoxicum*,\* a sort of cloth, mixed with silk. He has presented a pattern, of six ells and three quarters in length, to the government established at Buda. This cloth, the first fabrication of which cost nine francs, but which, according to the calculations of the inventor, will not amount in the sequel to above four francs, is two ells in width, and pretty fine. It appears, however, that this is not the first essay that has been made to convert the down of the *aselepias* to economical purposes; but hitherto the experiments have been only of simple curiosity, and not practised on a large scale.

\* A species of the SWALLOW WORT.